PCT/US2003/028547

FIGURE 1033

 ${\tt MSSVAVLTQESFAEHRSGLVPQQIKVATLNSEEESDPPTYKDAFPPLPEKAACLESAQEPAGAWGNKIRPIKASV}$ ITQVFHVPLEERKYKDMNQFGEGEQAKICLEIMQRTGAHLELSLAKDQGLSIMVSGKLDAVMKARKDIVARLQTQ ${ t ASATVAIPKEHHRFVIGKNGEKLQDLELKTATKIQIPRPDDPSNQIKITGTKEGIEKARHEVLLISAEQDKRAVE}$ RLEVEKAFHPFIAGPYNRLVGEIMQETGTRINIPPPSVNRTEIVFTGEKEQLAQAVARIKKIYEEKKKKTTTIAV EVKKSQHKYVIGPKGNSLQEILERTGVSVEIPPSDSISETVILRGEPEKLGQALTEVYAKANSFTVSSVAAPSWL $\tt HRFIIGKKGQNLAKITQQMPKVHIEFTEGEDKITLEGPTEDVNVAQEQIEGMVKDLINRMDYVEINIDHKFHRHL$ IGKSGANINRIKDQYKVSVRIPPDSEKSNLIRIEGDPQGVQQAKRELLELASRMENERTKDLIIEQRFHRTIIGQ KGERIREIRDKFPEVIINFPDPAQKSDIVQLRGPKNEVEKCTKYMQKMVADLVENSYSISVPIFKQFHKNIIGKG GANIKKIREESNTKIDLPAENSNSETIIITGKRANCEAARSRILSIQKDLANIAEVEVSIPAKLHNSLIGTKGRL IRSIMEECGGVHIHFPVEGSGSDTVVIRGPSSDVEKAKKQLLHLAEEKQTKSFTVDIRAKPEYHKFLIGKGGGKI ${\tt RKVRDSTGARVIFPAAEDKDQDLITIIGKEDAVREAQKELEALIQNLDNVVEDSMLVDPKHHRHFVIRRGQVLRE}$ IAEEYGGVMVSFPRSGTQSDKVTLKGAKDCVEAAKKRIQEIIEDLEAQVTLECAIPQKFHRSVMGPKGSRIQQIT RDFSVQIKFPDREENAVHSTEPVVQENGDEAGEGREAKDCDPGSPRRCDIIIISGRKEKCEAAKEALEALVPVTI EVEVPFDLHRYVIGQKGSGIRKMMDEFEVNIHVPAPELQSDIIAITGLAANLDRAKAGLLERVKELQAEQEDRAL RSFKLSVTVDPKYHPKIIGRKGAVITQIRLEHDVNIQFPDKDDGNQPQDQITITGYEKNTEAARDAILRIVGELE QMVSEDVPLDHRVHARIIGARGKAIRKIMDEFKVDIRFPQSGAPDPNCVTVTGLPENVEEAIDHILNLEEEYLAD VVDSEALQVYMKPPAHEEAKAPSRGFVVRDAPWTASSSEKAPDMSSSEEFPSFGAQVAPKTLPWGPKR

PCT/US2003/028547

FIGURE 1034

CCCAGCTCGGTGCTGCCGCCATCTTCTTGGAGGACAGGAGGAGGGGGAAGGCTCCCCCTCCCCGTGATCGCTCC GCACTCCCGCCACCACCTGCCCTCCCGCGACCGCCTCTCTCCTCCTCAGTGGGCACTTGTCTCCTAACAAAC GGCCTTCCCCCCACTCCAGTTACCCACCGCAAGGCGAAGATTCTCATTACCTGTTCCACTCTTATAAGCATAAGA AAACCGAGCTCATAAGACGAAGCTTCACAAAAG<u>ATG</u>TCTAAGCAACAGCCAACTCAGTTTATAAATCCAGAAACA CCTGGCTATGTTGGATTTGCAAACCTCCCCAATCAAGTTCACCGAAAATCAGTGAAAAAAGGTTTTGAGTTCACA CTGATGGTGGTCGGTGAATCAGGTCTAGGAAAATCGACTCTCATAAACAGCCTATTCCTAACTGATCTGTACCCA GAAAGAGTCATACCTGGAGCAGCAGAAAAAATTGAAAGAACTGTCCAGATTGAGGCTTCAACTGTTGAAATTGAA GAGCGAGGGGTCAAGCTACGCCTGACAGTGGTAGATACCCCTGGCTATGGTGACGCTATCAACTGCAGAGATTGT TTTAAGACAATTATCTCCTATATTGATGAGCAATTTGAGAGGTACCTGCATGACGAGAGCGGCTTGAACAGGCGG CACATCATTGATAATAGGGTGCATTGTTGCTTTTACTTTATTTCACCTTTTGGACATGGACTTAAGCCCTTAGAT GTGGCGTTTATGAAGGCAATACACAACAAGGTGAATATTGTGCCTGTCATTGCAAAAGCTGACACTCTCACCCTG AAGGAACGGGAGCGGCTGAAGAAAAGGATTCTGGATGAAAATTGAAGAACATAACATCAAAATCTATCACTTACCT GATGCAGAATCAGATGAAGATGAAGATTTTAAAGAGCAGACTAGACTTCTCAAGGCTAGCATCCCATTCTCTGTG GTTGGATCCAATCAGTTGATTGAAGCCAAAGGAAAGAAGGTCAGAGGCCGCCTCTACCCCTGGGGTGTTGTGGAA GTGGAGAACCCAGAGCACAATGACTTTCTGAAGCTGAGAACCATGCTCATCACCCACATGCAGGATCTCCAGGAG GTGACCCAGGACCTTCATTATGAAAACTTCCGTTCTGAGAGACTCAAGAGAGGCGGCAGGAAAGTGGAGAATGAG GACATGAATAAAGACCAGATCTTGCTGGAAAAAGAAGCTGAGCTCCGCCGCATGCAAGAGATGATTGCAAGGATG $\tt CAGGCGCAGATGCAGATGCAGGCGGGGGATGGCGATGGCGGGGCTCTCGGGCACCACGTG{\color{red}{TAA}} GGTGAT$ TGTGTTTTCAATCCTTGGGAGGGTGCCATCCACATTTTAACAGTACCTGTGCCTGAGAATTTAATTTTTAAAAGA TGAATGTCTTCCTTTTCTTCTCCCTAACCACTAATGTTAGAATTGATTTCCAAGAATCGGCATGTATACTTAAT ACTGAATTTCTTTGATTTAACTGACTTAACAACTGACTAACCATTGATGAGCACTCCTGATTTTTATCTAGAACA TTCAGATTTACCATAATGTTCCTTAGTGGTAGAGGTGTGTGCCTAGTGATGTAGAAAGATACACTGACTTGGTGC AAACCAGTTTTGCTGCTATAATTCTATACTGTTGATTCGTCTGCGATTTTATCTGTTAACCAAATAAAACATAAT AGAATTTCCTAATGAGATATATCTTTATACTTAAACAGCTTTTTTAGAGGTGAGTTTTAAAGAAGTCTCTTAATT CTGATGCTAGGTTGTTTTTAAAACCACTATGCAAAGAACTCACCACAAGCCACCTTTTGTAGTGTTCTCCACTAA TACTGGTTATCCTGTGCTACAGAGAAAATCAAAGCAGTCATAAGCTCCAGTTTTCCGTATTGCAAATAAGACTCT TACCTACAAAATGAGATTCCAGTGAACTAATTTGGTTTTTACTCAACCAAATTAAAAATTTTTTTAAGGAAAATT AGCAGTTGGTCTATTCAGAATCAAACCTTTTTATATTTTATACTGCACTTTAGTGTATTTTCTGTCACTGTAGGT ATAGAAGATCTGCCTCCCCTGTGGAAATTGGGGTCTGTTGGTGGGCTTGCCCCTGAAGCCTGGCTTGGGTTGAAA AGTGTTCCCGCCCTAAGGCCTTGGTGCCCTGAACCTCTGATGCCTACCGGGTTCTCCTGATTTGAGTTTCCTTTA AATACTCCCTTTTTGAGTAATTTTCTGATGGGAGGAAAGTAGCAGTCATCATCTTTTTGTGTGCAGGCTGTCTCA TTTATTTTTAGCCATTGTCGTTTCATTCATTTTGTGTAATATAAACCGTGTGTCATGTCAAAGTGAAAGACATTT CAAATCTGTAGCATAGGCTAGTGGGCAGGTCCGCACAGTCGAAGCCACACCTGGTCTGTTTTCTGTGCACTGTAG CCTTAGTGTCACCTTTCTTGTGTCTCCTTATGGTACACTCCAGCGGTTGCCTTTTTTATCATTTCTACTGAA GTTGGGAAATTCAACCCCAGAAATTGACAGATGAAAGGAGACAATGGTTGTGTAGGGAGATGGAGAAAATGCTTA ATCTGAGGATGAGACAGGGTTTTTTCATTTTTGTGGGGGCTAGAAAAAACATAAAATGAGGCAGTTAAATAATAA TAGTTAATGAAGGTGTGCTACAGAAAATAATCTGGTGTTCTTGCTAACTTTGCCCTTCACTGTTGCTTAATTGTG AACAGCCAAAAGCTATATGTTATGGCTTATTGTGTGAAGGTAACTAAGAAGTGGTGTTCCATGACTTCAGAGTAC ATCCATGCGGAGTCCATTATTTGAGTTTGACATTTAATAACTTTGCTGGAAAATCTGTAAAAAAGAAAAACAAGT TTGCTAGTGACTAAGCCCCGCATATGTGAGTGAAAGTACTTCAGGCACGCTGCCTCCTGGTAACAGCTATGCAGG GAGGGAGGACCCACACTGCTACACTTCTGATCCCCTTTGGTTTTACTACCCCAAATCTAAATAGATACTTTTGATA ATAGATAACTGCTCTTTTACTAAGACATAGTCTCTACCTATAGAAATGTATTTTGAAAACACTTATTTTACACAG CAATTTTGTATCCATTTAAACTAACCTTTTATCAATAAAGCACTATTGTTTAGATATT

PCT/US2003/028547

FIGURE 1035

MSKQQPTQFINPETPGYVGFANLPNQVHRKSVKKGFEFTLMVVGESGLGKSTLINSLFLTDLYPERVIPGAAEKI ERTVQIEASTVEIEERGVKLRLTVVDTPGYGDAINCRDCFKTIISYIDEQFERYLHDESGLNRRHIIDNRVHCCF YFISPFGHGLKPLDVAFMKAIHNKVNIVPVIAKADTLTLKERERLKKRILDEIEEHNIKIYHLPDAESDEDEDFK EQTRLLKASIPFSVVGSNQLIEAKGKKVRGRLYPWGVVEVENPEHNDFLKLRTMLITHMQDLQEVTQDLHYENFR SERLKRGGRKVENEDMNKDQILLEKEAELRRMQEMIARMQAQMQMQMQMGGDGGGALGHHV

PCT/US2003/028547

FIGURE 1036

CACCGAGCGCCCTGGTGTCCCTCGCAGTGGACTGACGCCGCAGGGGGGGAGCTAGCCGGCTCCGCGCCTCTCCGC GGGATCCAGACGCCTCCTGGGGCTGCTGGCGGAGGGTCTGAGGCGGCGCGCCATGGCTCACCTCCGGGGATTTG CCAACCAGCACTCTCGAGTGGACCCTGAGGAGCTCTTCACCAAGCTCGACCGCATTGGCAAGGGCTCGTTTGGGG AGGTCTACAAGGGCATCGATAACCACACAAAGGAGGTGGTGGCCATCAAGATCATCGACCTGGAGGAGGCCGAGG GCTCCTACCTAAAGAGCACCAAGCTATGGATCATCATGGAGTACCTGGGCGGCGCTCAGCACTGGACTTGCTTA AACCAGGTCCCCTGGAGGAGACATACATTGCCACGATCCTGCGGGAGATTCTGAAGGGCCTGGATTATCTGCACT CCGAACGCAAGATCCACCGAGACATCAAAGCTGCCAACGTGCTACTCTCGGAGCAGGGTGACGTGAAGCTGGCGG ACTTTGGGGTAGCAGGCAGCTCACAGACACGCAGATTAAGAGGAACACATTCGTGGGCACCCCCTTCTGGATGG CACCTGAGGTCATCAAGCAGTCGGCCTACGACTTCAAGGCTGACATCTGGTCCCTGGGGATCACAGCCATCGAGC TGGCCAAGGGGGAGCCTCCAAACTCTGACCTCCACCCCATGCGCGTCCTGTTCCTGATTCCCAAGAACAGCCCAC TCATCGACCGCTATAAGCGCTGGAAGTCAGAGGGGCATGGCGAGGAGTCCAGCTCTGAGGACTCTGACATTGATG TTCACAAGGGGACGCCCTGCACAGTTCACAGAAGCCTGCGGAGCCCGTCAAGAGGCAGCCGAGGTCCCAGTGCC TGTCCACGCTGGTCCGGCCCGTCTTCGGAGAGCTCAAAGAGAAGCACAAGCAGAGCGGCGGGAGCGTGGGTGCGC TGGAGGAGCTGGAGAACGCCTTCAGCCTGGCCGAGGAGTCCTGCCCCGGCATCTCAGACAAGCTGATGGTGCACC TGGTGGAGCGAGTGCAGAGGTTTTCACACAACAGAAACCACCTGACATCCACCCGCTGAAGCGCACTGCTGTTCA GATAGGGGACGGAAGGTCGTTTGTTTTTGTTCTGAGCTCCATAAGAACTGTGCTGACTTGGAAGGTGCCCTGTGC TATGTCGTGCCTGCAGGGACACGTCGGATCCCGTGGGCCTCACATGCCAGGTCACCAGGTCACCGTCTCCTTCCA CCCCTGCAGTGTGCTGTTGTGCACGTCAGGGACGCTGTTCTCTATGCCCACTGCCCTCCTCCTCCTGGCCCA GCAGTATTGCTCACGGGGGCTCCAGCCGCCGGCGTGGCCCTCATGAGCTACGCCTGGGTCTTCTGCAGACTCATG CAGCCCTATGGCCGCTCAGACCAAGGCGCAGAGCAACTATCAGGGCAGCTCTGCCTCCTCCCCATGAGGTGGG GAGAGGCAACAGGGCAGCCCCAGAGGAGTGTCCTGGCCGCTGTCCTCCCGGGGCCCATGATGGCCATAGATTTG AATTGAATTACTTGTTTCCTGAAA

PCT/US2003/028547

FIGURE 1037

GGCACGAGGCCAATCCCATGCCTGGGGGAGAGACAGCGGCTCAGGAGTGGGGGAGCACGGGCCTTCTACACCACA TGGGAAGGCTCTGGCATGAGGTTTTCCTTTGGGAAGGTTGTTTGGGCCCCTGAAGTTCCATCTCCGAGAGTGGTG GCTCTCCCAGGGGCTGATGGGGGGGTTCTGTGAGGGAGAATCAGGGCTCGGGAAGCCACGCCTGGGAAGGCAGGA CACAGGACACAGCAGCTTTCTTTGGAAATCTCCCAGGTGAGGATTCACATCCCAAAATAAAATTCAGAAGCCAGG TGGCCTGTGCTCCCCATGGGTGACCTCTGGAGGCAGTGGACCAAGATGCAGCAAGGAGAGGATGCAGAACAGCTT TGAGATGAGGGGGAGCCCCATGGGCCCAGGCAGGCTAGAGGAGGCACAGGCCCTGCCACGGCCAACTCAGGTCA GCAGAGCACTCGCGGCGTGGGTGGGCTGAGTGGAGGTGCCTGGGAGCTGCCTAAATTCAGAAGCCTCCACTGCCA TGGAGACTGCCTGGCTGTCCTCTCAGCCAGGTGCCGTGTTGGCCTAGGACCCAGAGCCACACTGCAGC CTCCGCCGACTCCCTCCTTCCGGGCCTGCTCTAGTGAGGAGTGCCTAAGCCAGGACCCAGAAACTCAGAGTTGAT GGTGAGAGGGCCGCCTGAGTCAGGACACCTGGCTTCTTGAAAAGTTCGCTCTGCCAGAAACCACCTAGGGACC ACGTTAGCTGCCTTCCTTGAGCTCCCCAGGAGTCGGTTTCCACATCTGTGAGGTGGAGGGCTGGTGGAGGTGC TCATGGGGTGCGTGCTTGGGAGACAGCCAGGCCCAGGGTGGCTGCTTCCTGCTAAGTGGGGAGGTGAGAC AGATCTGGAAAGCCGTCTCCCTCAGATGGTTTCATTTAATGCTTTATACTGCCGAGTCTGGGGGCTTGTTTTGGT CCAGGCCGACCAGCACTTGGGATCTGATGGGACACGGCCAGTGCCTAGGGGTGCCAAGTCCAAGGCCTCCCACTG GTGATGAGGTGGCCCTCCCTGTCAACCCTGGTCCCTGGAGTCCCCAGCACCTGGGGGCCCTGGTGGGGCTGATGTC ACAGGTGTTTACTGTGCTGCTGCACTGGTCCTATGCCAGCCTCACCCATGTGGGGACCACGGAAGGCACACTCCC TTACCCCGGTGCGGGCCGTGCGGTCCCCCAGACGGACAGCTGTGGCGACCTGCGTTTCTCCCTGGGCCTG $\tt TGCTTCCTG\underline{\textbf{TAG}} \texttt{TTAGTCCGTCCCCTGGTTCCCCTGTGGCTCAGAGGCCGCGTCCCTGGCTTGTACATATGTGAT$ TGCTGTGGGCACACCCCAGACCCCATGTCATAGCTGCCGTCCCGACGTCACGACGCCTGTCCCGATGTCTTACAC

PCT/US2003/028547

FIGURE 1038

 ${\tt MRWPSLSTLVPGVPSTWGPGGADVTGVYCAAALVLCQPHPCGDHGRHTPLPPVPGRAVPQTDSSCGDLRFSLGLC} \\ {\tt FL}$

PCT/US2003/028547

FIGURE 1039

ATGGAGGAACGGCGGGCTCCGAGCCGCGCCCCGGAGTCCGCGAAACTTCCGAGCGGGCGCCCCTGAAGGACCTG
ACCCGCTTCGTGGATTTCAACATCAAAGGGCGCGACGTGATCGTGTTCCTCCACATCCAGAAGACGGGGGCACC
ACTTTCGGCCGGCACCTGGTGAAGAACATCCGGCTGGAGCAGCCTTGTAGCTGCAAAGCGGGTCAGAAGAAGTGC
ACCTGCCACCGGCCTGGCAAGAAGGAGACGTGGCTCTTCTCCCGCTTCTCCACCGGCTGGAGCTGCGGCTGCAC
GCCGACTGGACGGAGCTCACCAACTGCGTGCCGGCCATCATGGAGAAGAAGGACTGTCCCCGCAACCACACCAC
ACCAGTCCTGACCCAGAGCGACCCCGCGCTCCCTGCCCTGCCGATGGTTTCCTGGCGTCTTCAGCGGTTGGCGC
CGTGGCTTTGGGGAGGGAGGA

PCT/US2003/028547

FIGURE 1040

PCT/US2003/028547

FIGURE 1041

GCGGCAACAGCGGGGCCGATGTTGTTGGTGACTGCCTCTCCAGATGCTGAGGTGCCTGTATCATTGGCACAGG CCAGTGCTGAACCGTAGGTGGAGTAGGCTGTGCCTTCGGAAGCAGTATCTATTCACAATGAAGTTGCAGTCTCCC GAATTCCAGTCACTTTTCACAGAAGGACTGAAGAGTCTGACAGAATTATTTGTCAAAGAGAATCACGAATTAAGA ATAGCAGGAGGAGCAGTGAGGGATTTATTAAATGGAGTAAAGCCTCAGGATATAGATTTTGCCACCACTGCTACC CCTACTCAAATGAAGGAGATGTTTCAGTCGGCTGGGATTCGGATGATAAACAACAGAGGAGAAAAGCACGGAACA ATTACTGCCAGGCTTCATGAAGAAATTTTGAGATTACTACACTACGGATTGATGTCACCACTGATGGAAGACAT GCTGAGGTAGAATTTACAACTGACTGGCAGAAAGATGCGGAACGCAGAGATCTCACTATAAATTCTATGTTTTTA CATGCTAAACAGAGAATACAAGAGGATTATCTTAGAATTTTAAGATACTTCAGGTTTTATGGGAGAATTGTAGAC AAACCTGGTGACCATGATCCTGAGACTTTGGAAGCAATTGCAGAAAATGCAAAAGGCTTGGCTGGAATATCAGGA GAAAGGATTTGGGTGGAACTGAAAAAATTCTTGTTGGTAACCATGTAAATCATTTGATTCACCTTATCTATGAT CTTGATGTGGCTCCTTATATAGGTTTACCTGCTAATGCAAGTTTAGAAGAATTTGACAAAGTCAGTAAAAATGTT GATGGTTTTTCACCAAAGCCAGTGACTCTTTTGGCCTCATTATTCAAAGTACAAGATGATGTCACAAAATTGGAT GCAACAGATAGTTCAGACCCATTGAAACCCTATCAAGACTTCATTATAGATTCTAGGGAACCTGATGCAACTACT CGTGTATGTGAACTACTGAAGTACCAAGGAGAGCACTGTCTCCTAAAGGAAATGCAGCAGTGGTCCATTCCTCCA TTTCCTGTAAGTGGCCATGACATCAGAAAAGTGGGCATTTCTTCAGGAAAAGAAATTGGGGCTCTATTACAACAG TTGCGAGAACAGTGGAAAAAAAGTGGTTACCAAATGGAAAAAGATGAACTTCTGAGTTACATAAAGAAGACCTAA AACTGATGGCTACTAAAAAGCAGAGCATTT

PCT/US2003/028547

FIGURE 1042

GGACACCGGGCCATGCACGCCCCCAACTGAAGCTGCATCTCAAAGCCGAAGATTCCAGCAGCCCAGGGGATTTCA AAGAGCTCAGACTCAGAGGAACATCTGCGGAGAGACCCCCGAAGCCCTCTCCAGGGCAGTCCTCATCCAGACGCT CCGCTAGTGCAGACAGGAGCGCGCAGTGGCCCCGGCTCGCCGCCATGGAGCGGATCCCCAGCGCGCAACCACCA CCCCGCCTGCCCAAAGCACCGGGACTGGAGCACGGAGACCTACCAGGGATGTACCCTGCCCACATGTACCA AGTGTACAAGTCAAGACGGGGAATAAAGCGGAGCGAGGACAGCAAGGAGACCTACAAATTGCCGCACCGGCTCAT CGAGAAAAAGAGACGTGACCGGATTAACGAGTGCATCGCCCAGCTGAAGGATCTCCTACCCGAACATCTCAAACT TACAACTTTGGGTCACTTGGAAAAAGCAGTGGTTCTTGAACTTACCTTGAAGCATGTGAAAGCACTAACAAACCT AATTGATCAGCAGCAGCAGAAAATCATTGCCCTGCAGAGTGGTTTACAAGCTGGTGAGCTGTCAGGGAGAAATGT CGAAACAGGTCAAGAGATGTTCTGCTCAGGTTTCCAGACATGTGCCCGGGAGGTGCTTCAGTATCTGGCCAAGCA TGGTACCTCCAGGAGCCATCAGACCCAGCTCCCAAAGTGATGGACTTCAAGGAAAAACCCAGCTCTCCGGCCAA AGGTTCGGAAGGTCCTGGGAAAAACTGCGTGCCAGTCATCCAGCGGACTTTCGCTCACTCGAGTGGGGAGCAGAG CGGCAGCGACACGGACACAGTGGCTATGGAGGAGAATCGGAGAAGGGCGACTTGCGCAGTGAGCAGCCGTG CTTCAAAAGTGACCACGGACGCAGGTTCACGATGGGAGAAAGGATCGGCGCAATTAAGCAAGAGTCCGAAGAACC CCCCACAAAAAAGAACCGGATGCAGCTTTCGGATGATGAAGGCCATTTCACTAGCAGTGACCTGATCAGCTCCCC CCTGCCCATGCTGGAGAGTGCTGGTATCCCACCTCAGTGCCAGTGCTATACCCAGGCCTCAACGCCTCTGCCGC AGCCCTCTCTAGCTTCATGAACCCAGACAAGATCTCGGCTCCCTTGCTCATGCCCCAGAGACTCCCTTCTCCCTT GCCAGCTCATCCGTCCGTCGACTCTTCTGTCTTGCTCCAAGCTCTGAAGCCAATCCCCCCTTTAAACTTAGAAAC TTTTTGTGAATGCTGCAAGATTGTTGCATTGTGTATACTGAGATAATCTGAGGCATGGAGAGCAGATTCAGGGTG TGTGTGTGTGTGTGTGTGTGTGTGTGTGCGTGCGTGCACATGTGTGCCTGCGTGTTGGTATAGGACTTTAAAG GGCTTTTCCCCACCCAGAGAATAGCCCCCTTCGATACACATCAGCTGGATTTTCAAAAGCTTCAAAGTCTTGGTC TGTGAGTCACTCTTCAGTTTGGGAGCTGGGTCTGTGGCTTTGATCAGAAGGTACTTTCAAAAGAGGGCTTTCCAG GGCTCAGCTCCCAACCAGCTGTTAGGACCCCACCCTTTTGCCTTTATTGTCGACGTGACTCACCAGACGTCGGGG AGAGAGAGCAGTCAGACCGAGCTTTCTGCTAACATGGGGAGGTAGCAGGCACTGGCATAGCACGGTAGTGGTTTG GGGAGGTTTCCGCAGGTCTGCTCCCCACCCCTGCCTCGGAAGAATAAAGAGAATGTAGTTCCCTACTCAGGCTTT AGAAATGCGGACACCCCGAGCGAGCACCCCAAAGTGCACAAAGCTGAGTAAAAAGCTGCCCCCTTCAAACAGAAC TAGACTCAGTTTTCAATTCCATCCTAAAACTCCTTTTAACCAAGCTTAGCTTCTCAAAGGCCTAACCAAGCCTTG GCACCGCCAGATCCTTTCTGTAGGCTAATTCCTCTTGCCCAACGGCATATGGAGTGTCCTTATTGCTAAAAAGGA CAGCTTTTCAAAATGCACTATGCCTGATTGCTGATCGTGTTTTAACTTTTTCTTTTCCTGTTTTTATTTTGGTAT ATTTTTTTTTTCTCTAGGGAGAGGTACAGTGTTTATATTTTGGAGCCTTCCTGAAGGTGTAAAATTGTAAATTTT TTTATCTATGAGTAAATGTTAAGTAGTTGTTTTAAAATACTTAATAAAATAATTCTTTTCCTGTGGAAG

PCT/US2003/028547

FIGURE 1043

GCGGCTTCCGGCGGCGTGACCTGACCGCAAGAGGCCCAATGGAGTGTGGGAGCTGAAAGGGTCTTCGCTGGCGGCC GGTAACTGGCGGCGGTTGGGAACGGCCGAGTGTGGCTCTTCTGGTGTTTCAGCTTGGGGAGAGAGGGGTGGCCTT CCTCTTGCAGTTGAGGCCGGCGCGGAGCCGGACTTCAGGCGGATCTCGTGGCGGAGCCCATCTTGCTCCCTCTCC CAGGCCTTTACCCGCTCCCTAGGATTCCCGGGCCCTGTAGGTGGGAGTTGGGAGACGACAGTACTGCTTTTAAAG AGACAGTGTTAGGGATCTTGGAAGCACAGCCAAC<u>ATG</u>TGTGACATTGAAGAAGCCACTAACCAACTCCTAGATGT GAACCTTCATGAGAACCAGAAGTCTGTACAAGTGACAGAAAGTGACCTCGGAAGTGAATCTGAGCTTCTAGTCAC TATTGGAGCCACTGTACCTACTGGCTTTGAGCAAACAGCTGCAGATGAAGTCAGAGAAAACTTGGGTCATCATG CAAAATCAGCAGAGACCGTGGCAAGATATTTTTGTCATTTCAGTGGAAAGTCTGGCACAGGTTCATTGTCTGAG AAAGGATTTTGAAGACTTGGCTGGAAAACTCCCATGGTCAAAACCCCTTAAAAGTGTGGAAAAATTAATGCCAGTTT TAAAAAGAAAAAAGCAAAAGCGCAAAAAAGATAAATCAGAATTCAAGTAAAGAGAAGATTAATAATGGACAAGAAGT CAAAATCGATCAGAGAAATGTTAAAAAAGAGTTCACTAGCCATGCTTTAGATTCTCATATCTTAGATTATTATGA AAATCCAGCCATCAAAGAGGATGTATCAACATTAATAGGTGATGATTTGGCATCTTGCAAAGATGAGACTGATGA AAGCTCAAAAGAAGAAACTGAGCCTCAAGTGCTGAAGTTTAGAGTCACATGCAACAGGGCAGGAGAAAACATTG $\verb|CTTTACCTCAAATGAGGCTGCAAGAGATTTTGGGGGTGCTGTTCAAGATTATTTTAAGTGGAAGGCCGACATGAC| \\$ CAACTTTGATGTGGAGGTTCTTTTGAACATCCATGATAATGAAGTCATTGTGGGCATTGCATTGACTGAAGAGAG TCTCCACCGAAGAATATAACACATTTTGGACCTACAACTCTTAGATCAACTCTTGCCTATGGGATGCTCAGGCT CTGTGATCCTCTACCTTATGATATAATAGTCGATCCAATGTGTGGAACTGGGGCAATACCAATAGAGGGGGCCAC TGAATGGTCTGACTGTTTCCATATTGCTGGTGATAATAATCCACTGGCTGTGAATAGAGCAGCAAATAACATTGC ATCTTTATTGACCAAGAGCCAAATTAAAGAAGGCAAACCCTCCTGGGGCTTGCCCATAGATGCTGTTCAGTGGGA TATCTGCAATCTGCCGTTGAGAACTGGCTCTGTGGATATTATTGTAACAGATTTGCCATTTGGAAAAAGGATGGG ATCCAAGAAGAGAAACTGGAACCTTTATCCAGCTTGCCTACGCGAGATGAGCCGTGTCTGCACACCTACCACAGG CCGAGCTGTACTACTCAAGACACAAAATGCTTTACCAAGGCGTTATCTGGAATGCAACACGTATGGCGAAA GGTGGATACAGTCTGGGTGAACGTTGGIGGTCTTCGTGCTGCAGTTTACGTTCTGATACGTACACCTCAAGCTTT TGTTCATCCTTCAGAACAAGACGGAGAAAGAGGGAACTCTTTGGCAATGCAAAGAATGAAGATGACTAATAGTACT TGTACTTCCCACCACTGGAAATGTTAGCATAAAAGAACTTGGAGAGAAAAAAGTATTAACAAAACTGCAGTCTG CACTCTTTAAACCTGTTTAAGGCTCTTCATCCTGGTTAGCAAAAGGTGTGAATGTAATGTGATGGAATTTAAAAG TTTTATGAGACCAGGCACAGTGGCTCACGACTGTAATTCCAGCAGTTTAGGAAGCCGAAGTGTGCAGATCACCTG AGGTCCGGAGACCAGCCTGGCCAACATGGTGAAACCCTGTCTCTACTAGAAATACAAAAATTAGCCAGGTGTGGT GGCGGGCGCCTGTAATCCCAACTACTCAGGAGGCTGAGGCTAGAGAATCACTTGAACCCAGCAGGCGGAGGTTGC GGTGAGTCGAGATCACGCCATTGCACTCCAGCCTGTGCGACAAGAGCGAAACTCTGTCTCAAAAAGATTTTATAA GAAAGCAGAGCTTTTCCTTGAAGCTCTTTTGAAGTGGTAGCTTAATTAGTATTTTGTTGAAAATACTTTAAAGAT GCCTAGTGAAAAGCCTACTAAAGTGCTGTGAGATTGGGGTTTAGAACATTTTATTTTCAGGCTTTATGGCCTATT TCATTCTTTGCAGCTTTGCTAATCCAGTTGCTCAAGTTCTTTACCTCAACCTGAAGGAATGAAGCATTATTACAT TTTGTGAATGGTGTTCAGCCTATAAGACGAAGTCTCACAAGACCTATAGGAAAGTTTACCATCTGCCTAAATATT AAAATATCCATCTGTTATTCACATTAATACACAGAATGAAAATAGAGGTCTAGGAATTATCAAAGGTACTGCAAA AATACTGTATAGAACTTATTTGTAAATAGCACATACATTGATAGATGGGGTGTGGGACCAACAAACCAAATTAAA AGAAATTGTTTTCTTTCAGTACACTAAGGTGTGTGTTTTCAAAACC

PCT/US2003/028547

FIGURE 1044

MCDIEEATNQLLDVNLHENQKSVQVTESDLGSESELLVTIGATVPTGFEQTAADEVREKLGSSCKISRDRGKIYF VISVESLAQVHCLRSVDNLFVVVQEFQDYQFKQTKEEVLKDFEDLAGKLPWSNPLKVWKINASFKKKKAKRKKIN QNSSKEKINNGQEVKIDQRNVKKEFTSHALDSHILDYYENPAIKEDVSTLIGDDLASCKDETDESSKEETEPQVL KFRVTCNRAGEKHCFTSNEAARDFGGAVQDYFKWKADMTNFDVEVLLNIHDNEVIVGIALTEESLHRRNITHFGP TTLRSTLAYGMLRLCDPLPYDIIVDPMCGTGAIPIEGATEWSDCFHIAGDNNPLAVNRAANNIASLLTKSQIKEG KPSWGLPIDAVQWDICNLPLRTGSVDIIVTDLPFGKRMGSKKRNWNLYPACLREMSRVCTPTTGRAVLLTQDTKC FTKALSGMQHVWRKVDTVWVNVGGLRAAVYVLIRTPQAFVHPSEQDGERGTLWQCKE

PCT/US2003/028547

1121/6881 FIGURE 1045

GCAGGCAGGTGCCATGGGCCGCTTGAGGCACACTGAGGGGACGCGGGGCTGGGCCATGGCCGGCGCTCGGGCCG CCGCCGCCGCTGCCTCGGCGGGGTCCTCGGCCTCTTCAGGCAACCAGCCGCCTCAGGAGCTGGGGCTTGGGGAGC TGCTGGAGGAGTTCTCCCGGACTCAGTACCGGGCCAAGGATGGCAGCGGGACCGGCGGCTCTAAGGTTGAGCGCA TTGAGAAGAGATGTCTGGAGCTGTTTGGCCGAGACTACTGTTTCAGCGTGATTCCAAACACGAATGGGGATATCT GTGGCCACTATCCCCGGCACATCGTGTTCCTGGAGTATGAGAGTTCTGAGAAGGAGAAAGACACGTTTGAGAGTA CCGTACAGGTGAGCAAGTTGCAAGACCTCATCCACCGCAGCAAGATGCCCCGGTGCAGAGGACGGTTTGTCTGCC CAGGCTACAACTATTTTTCTCAGGGGGTGCAGATGATGCCTGGGCAGATGTGGAGGACGTCACGGAGGAGGACCT GTGCTCTTCGAAGTGGTGACACGCATCTTTTTGATAAGGTCAGAGGCTATGACATCAAGCTGCTTCGATACCTGT CAGTCAAATACATCTGTGACCTGATGGTGGAGAACAAGAAGGTGAAGTTTGGCATGAATGTAACCTCCTCTGAGA AGGTGGACAAAGCCCAGCGCTATGCCGACTTCACTCTCCTCTCCATCCCGTATCCAGGCTGTGAATTTTTCAAGG AATATAAAGATCGGGATTACATGGCAGAAGGGCTCATATTTAACTGGAAGCAGGACTACGTTGATGCCCCATTGA GCATCCCGACTTCCTGACTCTCTGAACATTGACTGGAGCCAGTATCAGTGTTGGGATCTGGTGCAACAAA CACAAAACTACCTGAAGCTGCTGCTTTCCTTAGTTAACAGTGATGACAGCGGGCTGCTGGTACACTGTATCT ${\tt CAGGCTGGGATCGGACCCCCTCTTCATCTCCCTCCTGCGCCTTTCCTTGTGGGCTGATGGGCTCATCCACACGT}$ CCCTGAAGCCCACTGAGATCCTCTACCTCACTGTGGCCTATGACTGGTTCCTCTTCGGGCACATGTTGGTAGATC GGCTCAGCAAAGGGGAGAGATTTTCTTCTTCTGCTTCAATTTTTTGAAGCATATTACCTCCGAGGAGTTCTCTG CTCTGAAGACCCAGAGGAGGAAGAGTTTGCCAGCCCGGGATGGAGGCTTCACCCTGGAAGACATCTGCATGCTGA GACGAAAGGACCGTGGCAGCACCACCAGCCTTGGCAGCGACTTCTCCCTGGTCATGGAGAGTTCCCCAGGAGCCA CTGGGAGCTTCACCTATGAGGCCGTGGAGCTGGTCCCAGCAGGAGCGCCAACTCAGGCAGCTTGGCTTGCAGCCC TGAGTGATCGAGAGACTCGGCTGCAGGAGGTGCGCTCAGCCTTCTTGGCTGCGTACAGCAGCACAGTGGGGCTTC GGGCAGTAGCCCCCAGTCCTTCCGGTGCCATCGGGGGCCTGCTGGAGCAATTTGCCCGTGGTGTTGGACTCCGGA GCATCAGCAGCAATGCCTTG<u>TGAA</u>GAAGCCAGCCCATGACATTTTCCTGCTCCTCTCTCAGCTGAGCCCTTAGCA GAGAATCAAAGCCATGCCTGGCCGAAGGGGTACTTCCAGGTCAGGGGAAATTTCAGTCCCCCATCTCCATCATGA ACATGGCAGCCCCAAAGCTGAGCAAGGCCAAAGACAGGGTTTTCCAACCCCCAGCCTCTTGACTGGTGACCACCA CCCCTTCTTGTCACTGTCTCCCACCCCACCCATCTTTGCTGGGATTCCCATCAACTCTCAGAACTGTGTGGGGTT TCCCTGGGGCCTTGTGGAAGCCATGACTTCACAAAGACCCTACCTGTCAGTTCTTGTTTCTGGGGAGGAGGATC AAA

PCT/US2003/028547

1122/6881 FIGURE 1046

MARCRGRFVCPVILFKGKHICRSATLAGWGELYGRSGYNYFFSGGADDAWADVEDVTEEDCALRSGDTHLFDKVR GYDIKLLRYLSVKYICDLMVENKKVKFGMNVTSSEKVDKAQRYADFTLLSIPYPGCEFFKEYKDRDYMAEGLIFN WKQDYVDAPLSIPDFLTHSLNIDWSQYQCWDLVQQTQNYLKLLLSLVNSDDDSGLLVHCISGWDRTPLFISLLRL SLWADGLIHTSLKPTEILYLTVAYDWFLFGHMLVDRLSKGEEIFFFCFNFLKHITSEEFSALKTQRRKSLPARDG GFTLEDICMLRRKDRGSTTSLGSDFSLVMESSPGATGSFTYEAVELVPAGAPTQAAWLAALSDRETRLQEVRSAF LAAYSSTVGLRAVAPSPSGAIGGLLEQFARGVGLRSISSNAL

PCT/US2003/028547

FIGURE 1047A

GACTAAGCCACCATACGAGTGCCCGGTGGAGACCTGCCGAAAGGTCTACAAGAGTTACAGTGGTATTGAGTACCA CCTGTACCACTATGACCACGACAACCCACCCCCACAACAACTCCACTCCGCAAGCACAAGAAAAAGGGGCG CCAGTCACGCCCAGCCAACAAGCAGTCACCCAGCCCCTCAGAGGTCTCACAGTCACCAGGCCGTGAGGTGATGAG $\tt CTATGCACAGGCCCAGCGCATGGTGGAGGTGGACTTGCATGGCCGCGTCCACCGCATCAGCATCTTTGACAACCT$ GGATGTGGTGTCAGAGGATGAGGAAGCCCCCGAGGAGGCCCCTGAGAATGGCAGCAACAAGGAGAACACTGAGAC ACCAGCTGCTACTCCCAAGTCAGGCAAACATAAGAACAAGGAGAAGCGCAAGGACTCCAACCATCACCACCA CAATGTTTCTGCGAGCACCACTCCCAAGCTGCCAGAGGTGGTCTATCGGGAGCTGGAACAGGACACCCCTGATGC CCCACCCCGGCCAACTTCCTATTACCGGTACATCGAGAAGTCTGCAGAGGAGCTGGACGAGGAAGTAGAGTATGA GCAGGAGATCTTTGAGTACCTAATGGACCGACTGGAGAAGGAGTCGTACTTTGAGAGTCATAATAAAGGCGACCC TAATGCGCTAGTGGACGAGGATGCTGTTTGCTGTATCTGCAATGATGGTGAGTGCCAGAACAGCAATGTCATCCT CTTCTGTGACATGTGCAACCTGGCCGTGCACCAGGAGTGCTACGGTGTCCCCTATATCCCTGAGGGCCAGTGGCT GTGCCGCCGTTGCCTGCAGTCACCCTCTCGTGCTGTGGATTGTGCCCTGTGCCCCAACAAGGGCGGTGCCTTCAA GCAGACAGATGACGGGCGCTGGGCCCATGTGGTGTGTGCCTTGTGGATCCCTGAGGTCTGCTTCGCCAACACGGT CTTCCTAGAGCCTATTGACAGCATTGAGCACATCCCACCAGCTCGCTGGAAGCTCACCTGCTACATTTGCAAACA GGCTGGCCTTTACATGAAGATGGAGCCTGTGCGGGAGACAGGCGCCAACGGCACCTCTTTCAGTGTCCGCAAGAC GGATGAAGATGAGGAGGAGGATGAGGGTAAGGGCTGGAGCTCAGAGAAAGTCAAGAAGGCCAAGGCCAAGTCCCG GATCAAAATGAAGAAGGCACGGAAGATCCTGGCAGAGAAGCGGGCAGCACCTGTGGTGTCAGTGCCCTGCAT CCCACCACACAGGCTTAGTAAAATCACCAACCGCCTGACCATCCAAAGGAAGAGCCAGTTCATGCAGAGGCTGCA CAGCTACTGGACACTGAAGCGGCAGTCACGGAATGGGGTCCCATTGCTACGTCGCCTGCAGACACCCTGCAATC TCAGAGGAACTGTGACCAAGTTGGGAGAGATTCTGAGGATAAGAACTGGGCCCTTAAAGAACAGCTCAAGTCCTG GCAGCGGCTCCGGCATGACTTGGAGCGAGCTCGGCTGCTCGTGGAATTGATCCGCAAGCGGGAAAAACTCAAAAG GGAGACGATCAAGGTTCAGCAGATTGCCATGGAGATGCAGCTGACTCCTTTCCTCATCCTCCTTCGCAAAACCTT AGACCACATCAAAAAGCCCATGGACTTTTTCACCATGAAGCAGAACTTGGAGGCTTACCGCTACCTGAATTTTGA TGATTTTGAGGAGGACTTCAACCTCATCGTCAGCAACTGCCTCAAGTATAACGCCAAGGACACCATCTTCTACCG GGCAGCAGTGCGGCTTCGTGAGCAGGGTGGTGCTGCTCCGCCAGGCCCGGCGCCAGGCAGAAAAAATGGGCAT CGAGGAAGAGCGGCTGGTCTTGCTGGAGAACCAGAAGCACCTGCCAGTGGAAGAACAGCTAAAGCTGCTTCTGGA GACGGCACTGCGGCGAAGCTTGCCCATCAGCGAGAGACGGGACGTGATGGCCCTGAGCGGCATGGCCCCTCGAG CAGCCAGGAGACAAGCAAAGGCCTGGGTCCCAACATGTCCTCAACCCCCGCACATGAGGTGGGCAGGAGAACCTC GAGCCAGATGACCCCCAGCCACGGAGGCAGTCCTGTGGGGCCCCCCCAGCTCCCCATCATGAGTTCCCTGCGTCA GCGCAAGCGGGGTAGGAGCCCCCGGCCCAGTTCGAGCTCAGACAGCGACAGTGATAAGTCCACAGAAGACCCCCC CTGCAGCCTTCCCCGGAGCAGCTCAGACTCTGAGTCCAGCAGCAGTAGCAGTAGCAGCGCTGCTTCAGACCGGAC CAGCACAACGCCCTCAAAACAAGGCCGGGGCAAACCCTCCTTCTCTCGGGGCACTTTCCCAGAGGACAGCAGTGA GGATACCTCAGGCACTGAGAATGAGGCCTACTCCGTGGGCACTGGCCGCGGCGTGGGCCACAGCATGGTAAGGAA GAGTCTGGGCCGGGGAGCTGGCTGTCAGAGGATGAGGACTCCCCGCTGGATGCTCTGGACCTCGTGTGGGC CAAATGCCGAGGCTATCCATCATACCCAGCTCTGATCATTGATCCAAAGATGCCCCGAGAAGGTATGTTCCACCA TGGGGTTCCCATCCCTGTGCCCCCACTGGAGGTGCTGAAACTTGGGGAGCAGATGACCCAGGAAGCCCGAGAGCA TCTCTACCTCGTCCTCTTCTTTGACAACAAACGAACCTGGCAGTGGCTGCCCAGGACCAAGCTGGTTCCTCTGGG TGTGAACCAGGACCTAGACAAGGAGAAGATGCTGGAGGGCCGCAAGTCCAACATCCGCAAGTCAGTACAGATCGC

PCT/US2003/028547

FIGURE 1047B

PCT/US2003/028547

1125/6881 FIGURE 1048

MGVDFDVKTFCHNLRATKPPYECPVETCRKVYKSYSGIEYHLYHYDHDNPPPPQQTPLRKHKKKGRQSRPANKQS PSPSEVSQSPGREVMSYAQAQRMVEVDLHGRVHRISIFDNLDVVSEDEEAPEEAPENGSNKENTETPAATPKSGK HKNKEKRKDSNHHHHHNVSASTTPKLPEVVYRELEQDTPDAPPRPTSYYRYIEKSAEELDEEVEYDMDEEDYIWL DIMNERRKTEGVSPIPQEIFEYLMDRLEKESYFESHNKGDPNALVDEDAVCCICNDGECQNSNVILFCDMCNLAV HQECYGVPYIPEGQWLCRRCLQSPSRAVDCALCPNKGGAFKQTDDGRWAHVVCALWIPEVCFANTVFLEPIDSIE HIPPARWKLTCYICKQRGSGACIQCHKANCYTAFHVTCAQQAGLYMKMEPVRETGANGTSFSVRKTAYCDIHTPP GSARRLPALSHSEGEEDEDEEEDEGKGWSSEKVKKAKAKSRIKMKKARKILAEKRAAAPVVSVPCIPPHRLSKIT NRLTIQRKSQFMQRLHSYWTLKRQSRNGVPLLRRLQTHLQSQRNCDQVGRDSEDKNWALKEQLKSWQRLRHDLER ARLLVELIRKREKLKRETIKVQQIAMEMQLTPFLILLRKTLEQLQEKDTGNIFSEPVPLSEVPDYLDHIKKPMDF $\verb|FTMKQNLEAYRYLNFDDFEEDFNLIVSNCLKYNAKDTIFYRAAVRLREQGGAVLRQARRQAEKMGIDFETGMHIP| \\$ HSLAGDEATHHTEDAAEEERLVLLENQKHLPVEEQLKLLLERLDEVNASKQSVGRSRRAKMIKKEMTALRRKLAH QRETGRDGPERHGPSSRGSLTPHPAACDKDGQTDSAAEESSSQETSKGLGPNMSSTPAHEVGRRTSVLFSKKNPK TAGPPKRPGRPPKNRESOMTPSHGGSPVGPPQLPIMSSLRQRKRGRSPRPSSSSDSDSDKSTEDPPMDLPANGFS YSVGTGRGVGHSMVRKSLGRGAGWLSEDEDSPLDALDLVWAKCRGYPSYPALIIDPKMPREGMFHHGVPIPVPPL EVLKLGEQMTQEAREHLYLVLFFDNKRTWQWLPRTKLVPLGVNQDLDKEKMLEGRKSNIRKSVQIAYHRALQHRS KVQGEQSSETSDSD

PCT/US2003/028547

FIGURE 1049

GTACCCCCATCCTTTCTCTCGCCCCTCCTACCCGCAGCTCCTGGCGCTCGGCGGGGCTAACTGCAGCGCGGAGAT CTCGGCCGCCAAGCTCCGCCTCCGCCCCGGGCTGTGCCCCGGGGCTCGCCTGAGGCCGACCACCCCCAC $\verb|CTCTAGCGGCTTTGCTCGAGGCCCACCTTCTTCCCACCCCGGCAAACTCCAGTAGGCTCGCCCTCGCTGACTCC|\\$ CCGCCCCGCGTCAACTGCAAGGGGCCCGCCCATAGCCAGTTCCGGGGCGGTTGCTCACATCGACCGGAACTCCC ACTTCTGTGCCAGACACTGAACTGGGCTCTTGACGGGCATCATCTCTTAATCCTCAGAACATCCCAGGGAGCTCC ${\tt ACAGGATCCCCATATCCTGGGCC} \underline{{\tt ATC}} {\tt AGTGAGTTGAAAGACTGCCCCTTGCAGTTCCACGACTTCAAGTCTGTGG}$ ATCACCTGAAGGTCTGTCCCCGCTACACGGCAGTGCTGGCACGCTCTGAGGATGATGGCATCGGCATCGAGGAGC TGGACACCCTGCAGCTGGAGCCTGGAGACCCTGCTGTCTTCTGCCAGCCGGCGCCTGCGTGTGCTTGAGGCCGAAA CCCAGATCCTCACCGACTGGCAGGATAAGAAAGGTGACAGACGATTCCTGAAGCTGGGTCGAGACCATGAACTTG GAGCTCCCCCAAACATGGGAAGCCCAAGAAGCAGAAACTGGAAGGGAAGGCAGGACATGGGCCGGGCCCTGGCC CAGGACGGCCCAAATCCAAAAACCTTCAGCCCAAGATCCAGGAATATGAATTCACTGATGACCCTATCGACGTGC CACGGATCCCCAAAAATGATGCCCCCAACAGGTTCTGGGCTTCAGTGGAGCCCTACTGTGCTGACATCACCAGCG AGGAGGTCCGCACACTTGAGGAGTTACTGAAGCCCCCAGAAGATGAGGCTGAGCATTACAAGATCCCACCCCTGG GGAAGCACTACTCCCAGCGCTGGGCCCAGGAGGACCTGCTGGAGGAGCAGAAGGATGGGGCCCGGGCAGCGGCTG TGGCTGACAAGAAGAAAGGCCTCATGGGGCCACTGACCGAACTGGACACTAAAGATGTGGATGCCCTGCTGAAGA AGTCTGAGGCCCAGCATGAACAGCCGGAAGATGGATGCCCCTTTGGTGCCCTGACGCAGCGCCTCCTGCAGGCCC TGGTGGAGGAAAATATTATTTCCCCTATGGAGGATTCTCCTATTCCTGACATGTCTGGGAAAGAATCAGGGGCTG ACGGGGCAAGCACCTCCCCTCGCAATCAGAACAAGCCCTTCAGTGTGCCGCATACTAAGTCCCTGGAGAGCCGCA TTGCTGAGCTTCGCAAACGGCAGGCTGAGCTGAAGGCACTTAGTGCCCACAACCGCACCAAGAAGCACGACCTGC TGAGGCTGGCAAAGGAGGAGGTGAGCCGGCAGGAGCTGAGGCAGCGGGTGCGCATGGCTGACAACGAGGTCATGG AGACTCTGAAGGAGCGTGAGAGCATCCTGAAGCTGCTGGATGGGTAGCCCTCACCCCTGCCTCAGGCTGATTATC TGGCCTAGGGGAGGGGAAGGGAGGCCCACTTCCTTCTTTGGGCACAGGAAACATTGGCCTGTGGCTGTCCCTCAA ATGGCGGCAGTCTCTAGAGGGCCGTGGCCCTTCCCCTGAGGTCTTTTGGCCTAGCTCTGTACAACCAGGACACAG GAAGCCCTGCTGGGCTAGCCTGAGGCCTAGTCTCTGCTTGGTCCCCGAGATGGGGTTGGAGGGGACTTCGTTTCT GGGTCTTCCTCTTCCCCTCTTTACCATCCCCCACTCCCTAATCCCCTACCCCTGTCTCCCCTTCAAGGACTTCTC

PCT/US2003/028547

FIGURE 1050

MSELKDCPLQFHDFKSVDHLKVCPRYTAVLARSEDDGIGIEELDTLQLELETLLSSASRRLRVLEAETQILTDWQ DKKGDRRFLKLGRDHELGAPPKHGKPKKQKLEGKAGHGPGPGPGRPKSKNLQPKIQEYEFTDDPIDVPRIPKNDA PNRFWASVEPYCADITSEEVRTLEELLKPPEDEAEHYKIPPLGKHYSQRWAQEDLLEEQKDGARAAAVADKKKGL MGPLTELDTKDVDALLKKSEAQHEQPEDGCPFGALTQRLLQALVEENIISPMEDSPIPDMSGKESGADGASTSPR NQNKPFSVPHTKSLESRIKEELIAQGLLESEDRPAEDSEDEVLAELRKRQAELKALSAHNRTKKHDLLRLAKEEV SRQELRQRVRMADNEVMDAFRKIMAARQKKRTPTKKEKDQAWKTLKERESILKLLDG

PCT/US2003/028547

FIGURE 1051

GTACCCCCATCCTTTCTCTCGCCCCTCCTACCCGCAGCTCCTGGCGCTCGGCGGGGCTAACTGCAGCGCGGAGAT CTCTAGCGGCTTTGCTCGAGGCCCACCTTCTTCCCACCCCGGCAAACTCCAGTAGGCTCGCCCTCGCTGACTCC CCGCCCCGCGTCAACTGCAAGGGGCCCGCCCATAGCCAGTTCCGGGGCGGTTGCTCACATCGACCGGAACTCCC ACTTCTGTGCCAGACACTGAACTGGGCTCTTGACGGGCATCATCTCTTAATCCTCAGAACATCCCAGGGAGCTCC ACAGGATCCCCATATCCTGGGCC<u>A**TG**</u>AGTGAGTTGAAAGACTGCCCCTTGCAGTTCCACGACTTCAAGTCTGTGG ATCACCTGAAGGTCTGTCCCCGCTACACGGCAGTGCTGGCACGCTCTGAGGATGATGGCATCGGCATCGAGGAGC TGGACACCCTGCAGCTGGAGCCTGGAGACCCTGCTGTCTTCTGCCAGCCGGCGCCTGCGTGTGCTTGAGGCCGAAA CCCAGATCCTCACCGACTGGCAGGATAAGAAAGGTGACAGACGATTCCTGAAGCTGGGTCGAGACCATGAACTTG GAGCTCCCCCAAACATGGGAAGCCCAAGAAGCAGAAACTGGAAGGGAAGGCAGGACATGGGCCCGGGCCCTGGCC CAGGACGGCCCAAATCCAAAAACCTTCAGCCCAAGATCCAGGAATATGAATTCACTGATGACCCTATCGACGTGC CACGGATCCCCAAAAATGATGCCCCCAACAGGTTCTGGGCTTCAGTGGAGCCCTACTGTGCTGACATCACCAGCG AGGAGGTCCGCACACTTGAGGAGTTACTGAAGCCCCCAGAAGATGAGGCTGAGCATTACAAGATCCCACCCCTGG GGAAGCACTACTCCCAGCGCTGGGCCCAGGAGGACCTGCTGGAGGAGCAGAAGGATGGGGCCCGGGCAGCGGCTG TGGCTGACAAGAAGAAAGGCCTCATGGGGCCACTGACCGAACTGGACACTAAAGATGTGGATGCCCTGCTGAAGA AGTCTGAGGCCCAGCATGAACAGCCGGAAGATGGATGCCCCTTTGGTGCCCTGACGCAGCGCCTCCTGCAGGCCC TGGTGGAGGAAAATATTATTTCCCCTATGGAGGATTCTCCTATTCCTGACATGTCTGGGAAAGAATCAGGGGCTG ACGGGGCAAGCACCTCCCCTCGCAATCAGAACAAGCCCTTCAGTGTGCCGCATACTAAGTCCCTGGAGAGCCGCA TCAAGGAGGAGCTAATTGCCCAGGGCCTTTTGGAGTCTGAGGACCGCCCCGCAGAGGACTCCGAGGATGAGGTCC TTGCTGAGCTTCGCAAACGGCAGGCTGAGCTGAAGGCACTTAGTGCCCACAACCGCACCAAGAAGCACGACCTGC ${\tt TGAGG}{\tt TGA}{\tt GCGTTAGCAGGATGCACAGTCCCGGGGGTGGCCTTGGAGGCTGTGGCCACGGCTAGTCACCTTTCAG$ CAGTCCACCGGGTATGTCCCAAACAAATTCTGATTCCACAGAGTGGGGGCTCAGGCATCTGTGACCGATTGA TTTGATTTGTTTTTGTTTTTTTTTTTGAGAGGGAGTCTCGCACTGTCACCCAGGCTGGAGTGCAGTGGCATG ATCTCGGCTCACTGCAAGCTCCGCCTCCCAGGTTCATGCCATTCTCCTGCCTCAGCCTCCTGAGTAGCTGATACT ACAGGCACCCACCACCACCAGCTAATTTTTTGTATTTTTAGTAGAGACGGGGTTTCACCGTGTTAGCCAGG ATGGTCTCGATCTCCTGACCTCGTGATCCACCCGCCTCGGCCTCCCAAAGTGCCGGGATTACAGGCGTGAGCCAC TGCGCCTGGCCTAGTTTGGTTTTTTAATTATGGTAAAGGCATAATATAAAATGTATCTCCATGGGAGGCTGAGGC AGGAGAATCAGTTGAACCTGGGAGGCGGAGGTTGCAGTGAGCTGAGACTGCACCATTGCATTCCAGCCTGGGCAA AAGTTTTGTTATTAAAAATTTGATACACACAGAAAATCTGAAAGAATCATACAATAAACATCAGTATATTCTCCA ССТАААААААААААААААА

PCT/US2003/028547

FIGURE 1052

MSELKDCPLQFHDFKSVDHLKVCPRYTAVLARSEDDGIGIEELDTLQLELETLLSSASRRLRVLEAETQILTDWQ DKKGDRRFLKLGRDHELGAPPKHGKPKKQKLEGKAGHGPGPGPGRPKSKNLQPKIQEYEFTDDPIDVPRIPKNDA PNRFWASVEPYCADITSEEVRTLEELLKPPEDEAEHYKIPPLGKHYSQRWAQEDLLEEQKDGARAAAVADKKKGL MGPLTELDTKDVDALLKKSEAQHEQPEDGCPFGALTQRLLQALVEENIISPMEDSPIPDMSGKESGADGASTSPR NQNKPFSVPHTKSLESRIKEELIAQGLLESEDRPAEDSEDEVLAELRKRQAELKALSAHNRTKKHDLLR

PCT/US2003/028547

FIGURE 1053

GTACCCCCATCCTTTCTCTCGCCCCTCCTACCCGCAGCTCCTGGCGCGCGGGGCTAACTGCAGCGCGGAGAT CTCGGCCGCCAAGCTCCGCCTCCGCCCCGGGCTGTGCCCCGGGGCTCGCCTGAGGCCGACCACCCCGCACCCCAC $\verb|CTCTAGCGGCTTTGCTCGAGGCCCACCTTCTTCCCACCCCGGCAAACTCCAGTAGGCTCGCCCTCGCTGACTCC|\\$ CCGCCCCGCGTCAACTGCAAGGGGCCCGCCCATAGCCAGTTCCGGGGCGGTTGCTCACATCGACCGGAACTCCC ACTTCTGTGCCAGACACTGAACTGGGCTCTTGACGGGCATCATCTCTTAATCCTCAGAACATCCCAGGGAGCTCC ACAGGATCCCCATATCCTGGGCCATGAGTGAGTTGAAAGACTGCCCCTTGCAGTTCCACGACTTCAAGTCTGTGG ATCACCTGAAGGTCTGTCCCCGCTACACGGCAGTGCTGGCACGCTCTGAGGATGATGGCATCGGCATCGAGGAGC TGGACACCCTGCAGCTGGAGCTGGAGACCCTGCTGTCTTCTGCCAGCCGGCGCCTGCGTGTGCTTGAGGCCGAAA CCCAGATCCTCACCGACTGGCAGGATAAGAAAGGTGACAGACGATTCCTGAAGCTGGGTCGAGACCATGAACTTG GAGCTCCCCCAAACATGGGAAGCCCAAGAAGCAGAAACTGGAAGGGAAGGCAGGACATGGGCCGGGCCCTGGCC CAGGACGGCCCAAATCCAAAAACCTTCAGCCCAAGATCCAGGAATATGAATTCACTGATGACCCTATCGACGTGC CACGGATCCCCAAAAATGATGCCCCCAACAGGTTCTGGGCTTCAGTGGAGCCCTACTGTGCTGACATCACCAGCG AGGAGGTCCGCACACTTGAGGAGTTACTGAAGCCCCCAGAAGATGAGGCTGAGCATTACAAGATCCCACCCCTGG GGAAGCACTACTCCCAGCGCTGGGCCCAGGAGGACCTGCTGGAGGAGCAGAAGGATGGGGCCCGGGCAGCGGCTG TGGCTGACAAGAAGAAAGGCCTCATGGGGCCAĆTGACCGAACTGGACACTAAAGATGTGGATGCCCTGCTGAAGA AGTCTGAGGCCCAGCATGAACAGCCGGAAGATGGATGCCCCTTTGGTGCCCTGACGCGCCCTCCTGCAGGCCC TGGTGGAGGAAATATTATTTCCCCTATGGAGGATTCTCCTATTCCTGACATGTCTGGGAAAGAATCAGGGGCTG ACGGGGCAAGCACCTCCCCTCGCAATCAGAACAAGCCCTTCAGTGTGCCGCATACTAAGTCCCTGGAGAGCCGCA TCAAGGAGGAGCTAATTGCCCAGGGCCTTTTGGAGTCTGAGGACCGCCCCGCAGAGGACTCCGAGGATGAGGTCC TTGCTGAGCTTCGCAAACGGCAGGCTGAGCTGAAGGCACTTAGTGCCCACAACCGCACCAAGAAGCACGACCTGC TGAGGTGAGCGTTAGCAGGATGCACAGTCCCGGGGGTGGCCTTGGAGGCTGTGGCCACGGCTAGTCACCTTTCAG TTTGATTTGTTTTTGTTTTTTTTTGAGAGGGAGTCTCGCCTGGGCAACAAGAGTGAAACTGCATCTCAAA AAAAAAAAAAAAATTTACGCTTCTTAACCATTTTTAAGTGTACAGTTTAGTAGTGTTACCCATATTCACAT TGTTGTGTGATTTATTTTTTGTCTTTTCATGCTTCTTTTCTTTTTATCCCCAAAGTTTTGTTATTAAAAATTTGA

PCT/US2003/028547

FIGURE 1054

MSELKDCPLQFHDFKSVDHLKVCPRYTAVLARSEDDGIGIEELDTLQLELETLLSSASRRLRVLEAETQILTDWQ DKKGDRRFLKLGRDHELGAPPKHGKPKKQKLEGKAGHGPGPGPGRPKSKNLQPKIQEYEFTDDPIDVPRIPKNDA PNRFWASVEPYCADITSEEVRTLEELLKPPEDEAEHYKIPPLGKHYSQRWAQEDLLEEQKDGARAAAVADKKKGL MGPLTELDTKDVDALLKKSEAQHEQPEDGCPFGALTQRLLQALVEENTISPMEDSPIPDMSGKESGADGASTSPR NQNKPFSVPHTKSLESRIKEELIAQGLLESEDRPAEDSEDEVLAELRKRQAELKALSAHNRTKKHDLLR

PCT/US2003/028547

FIGURE 1055

PCT/US2003/028547

FIGURE 1056

MTATLRPYLSAVRATLQAALCLENFSSQVVERHNKPEVEVRSSKELLLQPVTISRNEKEKVLIEGSINSVRVSIA VKQADEIEKILCHKFMRFMMMRAENFFILRRKPVEGYDISFLITNFHTEQMYKHKLVDFVIHFMEEIDKEISEMK LSVNARARIVAEEFLKNF

PCT/US2003/028547

FIGURE 1057

CCAGGATAAGGGGCACAAGGGCCTCGGGTGTGGCCAGAGACCCCATGCTTAAGCTTTTATGGTATAGGTCAGGCT GCAGGGGTTTGAGGGCCTCAGTTGTATATCAGAATCTTCAGAGCACTGCGATGTTCAGGGGTGAGTCAGGTCTGT AGATGTGCACGGGGTCTTCTGAAGGGTCAGTTTCTGTAATCACTTTCAGGTGTGTCAGGGCCTTGTGCAGTAACA GTGCACACAGAAGTTAGTGTTTCTGTGGGCTAAGGGTTGTAGCTCTGTATCAGGATTCTGGGAGTGGGTCTGGAT TTCTGGTGTGTGGACTTAAGAAGCTGTGTCAGACTTGGGGGAGGGGGGTTCATGTATAACTGGGTTCACATAGGC CAAGACTCCCAGGTGCATTTTAGGCAGAGCCTCAGGTGTTTAGAGGTCCCAGGGGCAGAGAGGCTATAGGTGCT GTCAGAGGCCTTGGGGACATTTAGGGCAGAGCCTCGAGTGACAGGTCCTGGGACAGTGGGAGCCAAGGGCAAGTG TCGTGCTGGGCCTCAGGTAAGTGACAGGCCTTAGGACAATGGGGGCTGTGGCATGCGTCAGGTTACCTGCCTTGA TATGGGATCGTGACAGGCCCCTCCCTATGTGCAGGAGACAAGCAGCCCAAGAAACAGGAGAAAAACCCAGTGTTG GACAAGGACCTGGAGGCCCCGCTGTACCTCACCCCCGAGGGCTGGTCCCTCTTCCTCCAGCGCTACTACCAAGTG GTCCACGAAGGGGCAGAACTCAGGCACCTCGACACTCAGGTCCAGCGCTGTGAGGACATCCTGCAGCAGCTGCAG GCCGTGGTACCCCAGATAGACATGGAAGGGGATCGCAACATCTGGATCGTGAAGCCAGGAGCCAAGTCCCGCGGA CGAGGCATCATGTGCATGGACCACCTGGAGGAGATGCTGAAGCTGGTGAACGCCAACCCCGTGGTGATGAAGGAC GGCAAGTGGGTGCAGAAGTATATTGAGCGGCCCCTCCTCATCTTTGGCACCAAGTTTGACCTCAGACAGTGG TTCCTGGTAACTGACTGGAACCCACTTACCGTGTGGTTCTACCGCGACAGCTATATCCGCTTTTCCACGCAGCCC CATCGGCATCCACTGCTTCCGCCAGACAACATGTGGTCTAGCCAGAGGTTCCAGGCCCACCTGCAGGAGATGGGT GCCCCAAATGCTTGGTCCACCATCATCGTGCCTGGCATGAAGGATGCTGTGATCCACGCACTTCAGACCTCCCAG GACACCGTGCAGTGTCGGAAGGCCAGCTTTGAGCTCTATGGCGCTGACTTCGTGTTCGGGGAGGACTTCCAGCCC TGGCTGATTGAGATCAACGCCAGCCCCACGATGGCACCCTCCACAGCAGTCACTGCCCGGCTCTGTGCTGGCGTG CAAGCTGACACCCTGCGCGTGGTCATTGACCGGATGCTGGACCGCAACTGTGACACAGGAGCCTTTGAGCTCATC TATAAGCAGCCCGTCACCACTTCCCCAGCCTCCACACCAAGGCCCAGCTGCCTTCTCCCCATGTACTCCGACACCA AGGGCCAGGTCCTCAGACGACAGCACAGCAAGCTGGTGGGCACTAAGGCCCTGTCGACCACAGGCAAGGCCT<u>TGA</u>

PCT/US2003/028547

FIGURE 1058

MDIDKDLEAPLYLTPEGWSLFLQRYYQVVHEGAELRHLDTQVQRCEDILQQLQAVVPQIDMEGDRNIWIVKPGAK SRGRGIMCMDHLEEMLKLVNGNPVVMKDGKWVVQKYIERPLLIFGTKFDLRQWFLVTDWNPLTVWFYRDSYIRFS TQPFSLKNLDNSVHLCNNSIQKHLENSCHRHPLLPPDNMWSSQRFQAHLQEMGAPNAWSTIIVPGMKDAVIHALQ TSQDTVQCRKASFELYGADFVFGEDFQPWLIEINASPTMAPSTAVTARLCAGVQADTLRVVIDRMLDRNCDTGAF ELIYKQPVTTSPASTPRPSCLLPMYSDTRARSSDDSTASWWALRPCRPQARP

PCT/US2003/028547

FIGURE 1059

CGCCCAGTGCCCGAGGACGCAGGCTTTGGCACCGAAGCCCGGCATCAGAGGCAACCCCGCGGCTCCTGCCAACGG TCGGGGCCCCTCGGGGACCAGCCCTTCGCGGGGCTGCTGCCAAAAAACCTCAGTCGGGAGGAGCTGGTTGATGCG CTGCGGGCAGCCGTGGTGGACCGGAAAGGAAAACCAGGAGAGCTGACGTTGTTCTCAGTGCTGCCAGAGCTGAGC CTCTCCAGCTGTCCCCAGACAGCTAGTCGCCTCCAGAAGTACTTCACCCATGCACGGAGAGCCCAAAGGCCCACA GCCACCTACTGTGCTGTCACTGATGGGATCCCAGCTGCTTCTGAGGGGGAAGATCCAGGCTGCCCTGAAACTGGAA CACATTGATGGGGTCAATCTCACAGTTCCAGTGAAGGCCCCATCCCGAAAGGACATCCTGGAAGGTGTCAAGAAG ${\tt ACTCTCAGTCACTTTCGTGTGGTAGCCACAGGCTCTGGCTGTGCCCTGGTCCAGCTGCAGCCACTGACAGTGTTC}$ TCCAGTCAACTACAGGTGCACATGGTACTACAGCTCTGCCCTGTGCTTGGGGACCACATGTACTCTGCCCGTGTG GGCACTGTCCTGGGCCAGCGATTTCTGCTGCCAGCTGAGAACAACAAGCCCCAAAGACAGGTCCTGGATGAAGCC CTCCTCAGACGCCTCCACCTGACCCCCTCCCAGGCTGCCCAGCTGCCCTTGCACCTCCACCTACATCGGCTCCTT $\verb|CTCCCAGGCACCAGGGCCAGGGACACCCCTGTTGAGCTCCTGGCACCACTGCCCCCTTATTTCTCCAGGACCCTA|\\$ AACTTTACCTCTCTGGACTTGTGATAATAAAAGTTCCTACCTC

PCT/US2003/028547

FIGURE 1060

PCT/US2003/028547

FIGURE 1061

MASRAGPRAAGTDGSDFQHRERVAMHYQMSVTLKYEIKKLIYVHLVIWLLLVAKMSVGHLRLLSHDQVAMPYQWE YPYLLSILPSLLGLLSFPRNNISYLVLSMISMGLFSIAPLIYGSMEMFPAAQQLYRHGKAYRFLFGFSAVSIMYL VLVLAVQVHAWQLYYSKKLLDSWFTSTQEKKHK

PCT/US2003/028547

1139/6881 FIGURE 1062

GGAAGTTGAGCGGCGGCAAGAAATAATCGCGGCAGCTACGGGGGATCCTGGACTCTCTAAACTGCAGTTTGCCCC TTTTAGTAGTGCCTTGGATGTTGGGTTTTGGCATGAGTTGACCCAGAAGAAGCTGAACGAGTATCGGCTGGATGA AGCTCCCAAGGACATTAAGGGTTATTACTACAATGGTGACTCTGCTGGGCTGCCAGCTCGCTTAACATTGGAGTT CAGTGCTTTTGACATGAGTGCTCCCACCCCAGCCGTTGCTGCCCAGCTATTGGAACACTGTATAACACCAACAC ACTCGAGTCTTTCAAGACTGCAGATAAGAAGCTCCTTTTGGAACAAGCAGCAAATGAGATATGGGAATCCATAAA ATCAGGCACTGCTCTTGAAAACCCTGTACTCCTCAACAAGTTCCTCCTCTTGACATTTGCAGATCTAAAGAAGTA CCACTTCTACTATTGGTTTTGCTATCCTGCCCTCTGTCTTCCAGAGAGTTTACCTCTCATTCAGGGGCCAGTGGG TTTGGATCAAAGGTTTTCACTAAAACAGATTGAAGCACTAGAGTGTGCATATGATAATCTTTGTCAAACAGAAGG AGTCACAGCTCTTCCTTACTTCTTAATCAAGTATGATGAGAACATGGTGCTGGTTTCCTTGCTTAAACACTACAG TGATTTCTTCCAAGGTCAAAGGACGAAGATAACAATTGGTGTATATGATCCCTGTAACTTAGCCCAGTACCCTGG ATGGCCTTTGAGGAATTTTTTGGTCCTAGCAGCCCACAGATGGAGTAGCAGTTTCCAGTCTGTTGAAGTTGTTTG CTTCCGTGACCGTACCATGCAGGGGGGGGAGAGACGTTGCCCACAGCATCATCTTCGAAGTGAAGCTTCCAGAAAT GGCATTTAGCCCAGATTGTCCTAAAGCAGTTGGATGGGAAAAGAACCAGAAAGGAGGCATGGGACCAAGGATGGT GAACCTCAGTGAATGTATGGACCCTAAAAGGTTAGCTGAGTCATCAGTGGATCTAAATCTCAAACTGATGTGTTG TTGCAATGTAGCTAGGACGTTGATGGGTTGGGGCGTGAGACACATCACATTTGTGGACAATGCCAAGATCTCCTA CTCCAATCCTGTGAGGCAGCCTCTCTATGAGTTTGAAGATTGCCTAGGGGGTGGTAAGCCCAAGGCTCTGGCAGC AGCGGACCGGCTCCAGAAATATTCCCCGGTGTGAATGCCAGAGGATTCAACATGAGCATACCTATGCCTGGGCA TCCAGTGAACTTCTCCAGTGTCACTCTGGAGCAAGCCCGCAGAGATGTGGAGCAACTGGAGCAGCTCATCGAAAG AAAGCTGGTCATCAATGCTGCTTTGGGATTTGACACATTTGTTGTCATGAGACATGGTCTGAAGAAACCAAAGCA GCAAGGAGCTGGGGACTTGTGTCCAAACCACCCTGTGGCATCTGCTGACCTCCTGGGCTCATCGCTTTTTGCCAA CATCCCTGGTTACAAGCTTGGCTGCTACTTCTGCAATGATGTGGTGGCCCCAGGAGATTCAACCAGAGACCGGAC CTTGGACCAGCAGTGCACTGTGAGTCGTCCAGGACTGGCCGTGATTGCAGGAGCCCTGGCCGTGGAATTGATGGT ATTTGACAAATGTACAGCTTGTTCTTCCAAAGTTCTTGATCAATATGAACGAGAAGGATTTAACTTCCTAGCCAA GGTGTTTAATTCTTCACATTCCTTCTTAGAAGACTTGACTGGTCTTACATTGCTGCATCAAGAAACCCAAGCTGC TGCTGAGGAGCTCTCCATCGCCAGAGCAGGACTGCTGACCCCAGGCCTGGTGATTCTGGGCCCCTCCTCCATACC CCGAGGTCTGGGATTCCCCCCTCTGCTGCCCAGGAGTGGCCAGTGTTCGGCGTTGCTCGGGATTCAAGATACCAC

PCT/US2003/028547

FIGURE 1063

MAAATGDPGLSKLQFAPFSSALDVGFWHELTQKKLNEYRLDEAPKDIKGYYYNGDSAGLPARLTLEFSAFDMSAP
TPARCCPAIGTLYNTNTLESFKTADKKLLLEQAANEIWESIKSGTALENPVLLNKFLLLTFADLKKYHFYYWFCY
PALCLPESLPLIQGPVGLDQRFSLKQIEALECAYDNLCQTEGVTALPYFLIKYDENMVLVSLLKHYSDFFQGQRT
KITIGVYDPCNLAQYPGWPLRNFLVLAAHRWSSSFQSVEVVCFRDRTMQGARDVAHSIIFEVKLPEMAFSPDCPK
AVGWEKNQKGGMGPRMVNLSECMDPKRLAESSVDLNLKLMCWRLVPTLDLDKVVSVKCLLLGAGTLGCNVARTLM
GWGVRHITFVDNAKISYSNPVRQPLYEFEDCLGGGKPKALAAADRLQKIFPGVNARGFNMSIPMPGHPVNFSSVT
LEQARRDVEQLEQLIESHDVVFLLMDTRESRWLPAVIAASKRKLVINAALGFDTFVVMRHGLKKPKQQGAGDLCP
NHPVASADLLGSSLFANIPGYKLGCYFCNDVVAPGDSTRDRTLDQQCTVSRPGLAVIAGALAVELMVSVLQHPEG
GYAIASSSDDRMNEPPTSLGLVPHQIRGFLSRFDNVLPVSLAFDKCTACSSKVLDQYEREGFNFLAKVFNSSHSF
LEDLTGLTLLHQETQAAEIWDMSDDETI

PCT/US2003/028547

1141/6881 FIGURE 1064

PCT/US2003/028547

FIGURE 1065

MAALRPLVKPKIVKKRTKKFIRHQSDRYVKIKRNWRKPRGIDNRVRRRFKGQILMPNIGYGSNKKTKHMLPSGFR KFLVHNVKELEVLLMCNKSYCAEIAHNVSSKNRKAIVERAAQLAIRVTNPNARLRSEENE

PCT/US2003/028547

FIGURE 1066

CTGGAGGAGGAGAAGAGGTGGATCCCCGGATCCAGGGAGAACTGGAGAAGTTAAATCAGTCCACGGATGATATC AACAGACGGGAGACTGAACTTGAGGATGCTCGTCAGAAGTTCCGCTCTGTTCTGGTTGAAGCAACGGTGAAACTG GATGAACTGGTGAAGAAATTGGCAAAGCTGTGGAAGACTCCAAGCCCTACTGGGAGGCACGGAGGGTGGCGAGG CAGGCTCAGCTGGAAGCTCAGAAAGCCACGCAGGACTTCCAGAGGGCCACAGAGGTGCTCCGTGCCGCCAAGGAG ACCATCTCCCTGGCCGAGCAGCGGCTGCTGGAGGATGACAAGCGGCAGTTCGACTCCGCCTGGCAGGAGATGCTG GCCAGGTACAATGCCGCCATGGGCCGCATGCGACAGCTGGAGAAGAACTCAAGAGAGCCATCAACAAGTCCAAG CCTTATTTTGAACTCAAGGCAAAGTACTATGTGCAGCTCGAGCAACTGAAAAAAGACTGTGGATGACCTGCAGGCC AAACTGACCCTGGCAAAAGGCGAGTACAAGATGGCCCTGAAGAACCTGGAGATGATCTCAGATGAGATCCACGAG CGGCGCCCCCAGTGCCATGGGGCCTCGGGGATGCGGTGTTGGTGCTGAGGGCAGCAGCACATCTGTGGAGGAT CTGCCAGGGAGCAAACCTGAGCCTGATGCCATTTCTGTGGCCTCGGAGGCCTTTGAAGATGACAGCTGTAGCAAC TTTGTGTCTGAAGATGACTCGGAAACCCAGTCCGTGTCCAGCTTTAGTTCAGGACCAACAAGCCCGTCTGAGATG CCTGACCAGTTCCCTGCGGTTGTGAGGCCTGGCAGCCTGGATCTGCCCAGCCCTGTGTCCCTGTCAGAGTTTGGG ATGATGTTCCCAGTGTTGGGCCCTCGAAGTGAATGCAGCGGGGCCTCCTCCCCTGAATGTGAAGTAGAACGAGGA GACAGGGCAGAAGGGGCAGAGAATAAAACAAGTGACAAAGCCAACAACAACCGGGGCCTCAGCAGTAGCAGTGGC AGTGGTGGCAGCAGTAAGAGCCAAAGCAGCACCTCCCCTGAGGGCCAGGCCTTGGAGAACCGGATGAAGCAGCTC $exttt{TCCCTACAGTGCTCAAAGGGAAGAGATGGAATTATTGCTGACATAAAAATGGTGCAGATTGGC<math> exttt{TGA}$ $exttt{TCATCCTG}$ GGCCCTGGCCGATGTGCATATCAACATTTATACATGGAACTGGAGAACATTGTGCCAATAATCATTTAATATATG CCAAATCTTACACGTCTACTCTAAACTGCTCTAATGAAGTTTCAGTGACCTTGAGGGCTAAAGATTGTTCTTCTG GGTAAGAGCTCTTGGGCTGGTTTTTCAGAGCAGAGTTCTTGTTGTGGGTAGACTGTGACTAGGTTCACAGCCTTT GTGGAACATTCCGTATAACGGCATTGTGGAAGCAATAACTAGTTCCTATGAAAGAACCAGAGCTGGGAAGATGGC CACCTCTGGTGTTCAGAGGGGGCTTTTAAAAAAGCGTGTATGCTGGGATACCCATTAAAACCATTTTCTAGAAGG CTACCATGAGCTGCACTTTTTGGGGTGGGAAAGGTGAATGCCAGTGGGGATGCGGGGGGATGAGGGTAGGAGGGA TATTCTAAGAGAAGTGCATGTGAAGAATGGTTGCCACTGTTATTAGATTGACAAGATGTTAATTTCTCTGTAGGT TGTAACTTTAAAAATAAATGAAATTATTTAAGGGTTATGCTGCACTAGTATTCCTTAGAGGAAACAGTTCTTTAA AGTTAGGAAAGGGAGTAGGCAGGCATGTGTTGGCAAAGGCTGTTAATAGTAGTTAAGTGTTAAGACTGCTTTTCT TTAACGTTTTCATGGTAATGCATATTTAGAGCACTGTATTTTTGTCTTGTTAAGAAAATTTAGCATTTCTAAAAG AAAAAAGCAACCCTCTTTCAAACTGTTAATTCTGTCACAGCCTGTATATTTTAGTCATTTGTAAATCTCTTCATA CAATAGTGACTTCTTTTTTGACTGATACAGTATCTTAATTACAAGGTTATTTTGTACTTGTCTTAATACACTAAG TGTAATAAAAACGGCTTGAG

PCT/US2003/028547

FIGURE 1067

MEQGLEEEEVDPRIQGELEKLNQSTDDINRRETELEDARQKFRSVLVEATVKLDELVKKIGKAVEDSKPYWEAR RVARQAQLEAQKATQDFQRATEVLRAAKETISLAEQRLLEDDKRQFDSAWQEMLNHATQRVMEAEQTKTRSELVH KETAARYNAAMGRMRQLEKKLKRAINKSKPYFELKAKYYVQLEQLKKTVDDLQAKLTLAKGEYKMALKNLEMISD EIHERRRSSAMGPRGCGVGAEGSSTSVEDLPGSKPEPDAISVASEAFEDDSCSNFVSEDDSETQSVSSFSSGPTS PSEMPDQFPAVVRPGSLDLPSPVSLSEFGMMFPVLGPRSECSGASSPECEVERGDRAEGAENKTSDKANNNRGLS SSSGSGGSSKSQSSTSPEGQALENRMKQLSLQCSKGRDGIIADIKMVQIG

PCT/US2003/028547

FIGURE 1068

CATGGCAAAAGAACTCCCGGATAATCCGAATTCGTGGTCCTCAGAATTGGTTTAGGGTTGTTTCGCGGTTCTTCC CGTATTCTGCCTCCGAGGCCCAGTGGGGCTGGCTGTGGGGTGAGTGCGCCTGGCCCTAGCCCTGCAGCCCCCTGT GCTGTTTGAGGCGTGAAACTCACCTCAGGAAATGTATCTGATCCATTAGCGTGGATTCATATTATTTGGTGATGG AGAATCTTCAGCTGTGTTAAGTGTTACCGTCAGTTTCAGAGATGGCTTCTTTGCAAAGGAAAGGGCTGCAGGCAA GGATTCTCACCTCTGAAGAAGAGGAGAAACTGAAAAGAGACCAAACTTTGGTGTCTGATTTTAAACAGCAGAAAT GGACCACCAGAGAGTTTGAGGAGCTAAGATCATGTAGAGAGTTTGAAGATCAAAAGTTAACAATGCTTGAAGCTG GCTGTGGGGTTGGAAACTGTTTATTCCCACTTTTAGAAGAAGATCCGAATATCTTTGCCTATGCCTGTGATTTTT CTCCAAGAGCCATTGAATATGTTAAGCAAAATCCTTTATATGATACAGAAAGATGCAAGGTATTCCAGTGTGATC TGACTAAAGATGATCTTCTGGATCATGTACCGCCAGAGTCTGTGGATGTTGTTATGTTGATATTTTGTGCTGTCAG CTGTTCATCCTGATAAGATGCACCTTGTCTTACAAAACATTTACAAGGTATTAAAACCAGGCAAAAGTGTCTTGT TTCGTGACTACGGACTGTATGATCATGCCATGCTTAGGTTTAAAGCCAGCAGCAAACTTGGAGAAAACTTTTATG TTAGACAAGATGGGACCAGATCATATTTTTTACTGATGACTTCCTGGCTCAGCTCTTTATGGACACAGGTTATG TTCAGAGCAAATTTCTAAAGCCTCCTAAGAACCCATCTCCTGTGGTCCTGGGCCTGGATCCTAAGTCCTGACCTT TCATGAGGTTGGCATTTATACCTTCCCTTGAAGAGGAAAATTTAAAATCACTCTTTCGTCTGGGTGCGGTGGCTC ATGCCTGTAATCCCAGCACTTCGGGAGGCCGAGGTTGGGGGATCATCTGAGGTCAGGAGTTTGAGACCAGCCTGG CCAACATGGTGAGACCCCATCTCTACTAAAAATACAAAAAAATTAGCTGGGCATAGTGGCGAGTGCCTGTAATCC CAGCTACTCAGGAGGCTGAGGCAAGAGAATCGCTTGAACCCAAGAGGCGGAGACTGCAGTGAGCCAAGATCATGC ATTTTTTGAGACAGGATCTTGTGGTACGCAGGCTGGAGTGCAGTGGTGTGATCACAGCTCATTGTAGCCTCGA CCTCCCTGGGCTCAAGCAGTCTTCCTGCCTCAGCCTCCTGAGTAGCTAGGACTACAGGTGTAAGCCACCATGCC TGGCCCTTAATTTTTTTTTAATGAGCATGTACAGTAGTCCCGCTTTATCCATGGTTTCACTTACCACAATTTCAAT TACCTGTTTTCAACTGCAGTCAGTTACTTTTCTTAAGATATTTTGAGGGTTATAGGCTCATGCCTATAACCCCAG CACTTTGAGAGGCCAAGGCCAGCAGATCCCTTGAGCCCAGGAGTTCAAGACCAGTGTGGGCAACATGGTGAAACT CTGTCTCTACAGAAAATACAAAAATTAGCCAAATGTGGTGGCATGTGCCTGTAGTCCCAG

PCT/US2003/028547

FIGURE 1069

MASLQRKGLQARILTSEEEEKLKRDQTLVSDFKQQKLEQEAQKNWDLFYKRNSTNFFKDRHWTTREFEELRSCRE FEDQKLTMLEAGCGVGNCLFPLLEEDPNIFAYACDFSPRAIEYVKQNPLYDTERCKVFQCDLTKDDLLDHVPPES VDVVMLIFVLSAVHPDKMHLVLQNIYKVLKPGKSVLFRDYGLYDHAMLRFKASSKLGENFYVRQDGTRSYFFTDD FLAQLFMDTGYEEVVNEYVFRETVNKKEGLCVPRVFLQSKFLKPPKNPSPVVLGLDPKS

PCT/US2003/028547

FIGURE 1070A

GACAATGAAAAGCGAACCCCATTGCACGCCGCAGCTTACCTTGGAGATGCAGAAATCATTGAACTTCTTATTTTA TCTGGAGCTAGAGTTAATGCCAAAGACAGCAAATGGTTGACACCTTTACACAGAGCAGTTGCATCTTGTAGTGAG GAAGCAGTTCAGGTACTTTTGAAGCATTCTGCAGATGTTAATGCTCGAGACAAAAATTGGCAAACCCCTTTACAT ATAGCTGCTGCTAATAAAGCTGTAAAGTGTGCTGAAGCTTTGGTACCTCTTCTGAGTAATGTAAACGTATCTGAT $\tt CGAGCAGGGAGGACTGCATTACATCATGCAGCTTTCAGTGGACATGGTGAG{\color{red} ATG} GTCAAACTACTCTTGTCTAGA$ GGTGCCAATATTAATGCTTTTGACAAGAAAGATAGGCGTGCTATCCATTGGGCAGCATATATGGGTCACATTGAA GTAGTGAAATTGCTTGTGTCGCATGGAGCTGAAGTGACATGCAAGGATAAAAAGTCTTATACACCTCTTCATGCA GCTATTGTGAATCAAAAGAATGAAAAAGGATTTACTCCTTTGCACTTTGCTGCTGCATCAACACATGGAGCATTG TGTTTAGAGCTTCTAGTTGGCAATGGGGCCGATGTCAATATGAAGAGTAAAGATGGGAAAACCCCACTACACATG ACTGCTCTCCACGGTAGATTCTCCCGATCACAAACCATTATCCAGAGTGGAGCTGTAATCGACTGTGAGGATAAG AATGGAAATACCCCTTTGCACATAGCAGCACGGTATGGCCATGAGCTGCTGATCAACACTCTTATTACAAGTGGT GCTGACACTGCAAAGCGTGGCATACATGGAATGTTCCCCCTCCATTTGGCAGCCTTAAGCGGCTTTTCAGATTGC TGCAGAAAACTTCTTCTCAGGATTTGATATAGATACCCCAGATGATTTTGGCAGGACTTGTCTACATGCAGCT GCAGCTGGAGGGAATTTGGAGTGCCTAAACCTTCTGCTGAATACTGGTGCAGACTTTAATAAAAAGGACAAATTT GGGAGATCTCCACTGCACTACGCTGCCAACTGCAATTACCAGTGCCTGTTTGCTCTTGTGGGATCAGGAGCA AGTGTGAATGACCTTGATGAAAGAGGCTGCACACCCCTGCACTATGCAGCTACATCAGACACAGATGGCAAGTGC CTGGAATACTTATTAAGAAACGATGCAAATCCAGGGATCCGTGATAAGCAAGGATACAACGCAGTTCATTATTCA GCTGCTTATGGTCACCGTCTATGTCTTCAGCTGATTGCAAGTGAAACTCCTCTAGATGTTTTAATGGAAACCTCA GGAACAGACATGCTGAGTGATTCAGATAATAGAGCAACAATAAGCCCTTTACACTTGGCTGCCTATCATGGTCAC CATCAAGCACTGGAAGTGTTGGTACAGTCTTTGTTAGATCTTGATGTCAGAAATAGTAGTGGAAGAACACCCCTA GATCTTGCAGCTTTTAAGGGCCATGTTGAATGTGTGGATGTACTCATTAATCAGGGAGCCTCAATCTTAGTAAAA GATTACATTTTGAAGAGGACACCTATTCATGCAGCAGCAACAAATGGTCATTCAGAATGCTTACGGCTATTAATA GGAAATGCAGAACCACAGAATGCAGTGGATATTCAAGATGGAAATGGACAGACGCCTCTGATGCTATCTGTTCTC AACGGGCACACAGACTGTTTTACTCATTGCTGAACAAAGGAGCAAATGTAGATGCCAAAGATAAGTGGGGAAGG ACAGCGTTGCATAGAGGGCCAGTTACAGGCCATGAAGAATGTGTAGATGCATTACTTCAACATGGTGCTAAGTGC TTACTTCGGGATAGCAGGGGCCGGACGCCTATACACCTGTCTGCTGCCTGTGGACACATTGGTGTTCTTGGAGCC CTTTTGCAGTCAGCAGCATCTATGGATGCAAATCCAGCCACAGCAGACAATCATGGATATACGGCACTTCACTGG GCTTTTAGTCCATTGCATTGTGCCGTGATAAATGACAACGAAGGTGCTGCTGAGATGTTAATTGATACATTAGGT GCCAGCATTGTGAACGCCACAGATTCAAAAGGAAGAACTCCTCTCCATGCAGCCGCCTTCACAGACCATGTAGAG TGTTTACAGCTGCTCAGCCATAATGCTCAAGTCAATTCTGTGGACTCTACAGGGAAAACACCTCTTATGATG GCTGCAGAAAATGGACAAACAAATACAGTTGAGATGCTGGTTAGCAGTGCTAGTGCAGAACTGACTTTACAAGAT AACAGTAAAAATACTGCCCTCCATTTGGCTTGTAGCAAGGGTCATGAAACTAGTGCCTTGTTAATACTGGAAAAG ATAACAGATAGAAACCTCATCAATGCAACCAACGCAGCCTTGCAAACACCTCTGCATGTTGCTGCCCGAAATGGG CTAACAATGGTGGTTCAGGAACTTTTGGGAAAAGGAGCAAGTGTGCTTGCAGTAGATGAAAATGGCTATACCCCA GCTTTGGCCTGTGCTCCCAATAAGGATGTGGCTGATTGCCTGGCTCTCATTTTGGCCACCATGATGCCTGTCTCA TCAAGTAGTCCTTTATCATCCTTAACATTCAATGCCATTAACCGTTATACCAACACCTCAAAAAACAGTCAGCTTT GAAGCTTTGCCCATCATGAGGAATGAACCTAGCTCCTATTGCAGTTTCAATAACATTGGAGGGGAACAGGAGTAC ACAGTAAAGCTTCAAACTGTGCTTTTTCAGGAAAAAGGCACTTTGATATTCACGTAGAAATTCAACCTAAGAGGA AAGATCCCACAGTGAGCCAATGTTAAGAGATCTGATGGCATTAGGAGGAAGAGTTTTAAAGGCAAGTTTTACAAA AGGAACTTCTAGAATCTTGAAATAGACCTGACTGAGGAAAACACATTGATGTCAGAATTCTTTGTGGAATTGTTT AATTTGGTTTTGCAGTGCCAGGAACAATTGGGGACACTGTGCACTCTAACCTGCTTACACAAGCAACACTATTGT AACAGAAGAATAAAGACACTAGATTTAAATTTTATCAATAAAATTACAACTAAATTTAAAGGCAATAAAAGTTT GGTACAGTAGGCATTATGTGCACAGCAAATTGCAAAAGGACCAAATAACTGAAAGGTTTTTTTAATAAAATGCCA TTTTGTGGAAACTGGAGTAGATTAAATGAAACATTACCTAAACCAAACTGCAATATTTCTGGAAATGAAGCTGAG

PCT/US2003/028547

FIGURE 1070B

TATACTATTAGAATTAAAAACCAGCTGACTGGGTGCAATACGGGTGAAAATACTTGTGACATAGACATTGAGATG GAATTTCCTAGAAAAAATTCATGAAATCAAAAAGTAGACTATTTCACCCTATTGCAGCTAAGTGGTCCTGGGGC ATGGAGTCTTCAACCTCTCTATGAATGGCACACCTTAGTCACTTATGTTACTTTTGTGTCCCCACCATGGGTTGG GGGATTTTTTGTTTATTCTGATCTATGAGTTTTGAAAAAGTGAATAATCAAAAGGAAAATAATTCCTTGTTGTTĊ ATAAATTAAGCATCACTAAAGTCTCTTGAAAGGCATTTCTGTATTGGGCAAGATTTAAAATACTAAAGCCTTAGG GCTTTTACTGTAACTGTCACTTTCCCAGTGAAAATGATTTCATATACATTGAGGGTCTTACAGGTATGGGTAAAG TTCTATAAATTGCAACAAAATGATACCCAATTTCAT#TTATCCTT#TTGTATTGTGAAACTGGAAACTTTATGAC ATTGTAAATTATCAGCTGGTTTTTCTGAATATAAAGTGTGAAAACACAGAACAGTATTTTGATCTATTTGATAAT TTTGTGGGTTTTTTGAAGAATTAATGAGCATGTACATAGAAATAGTGACTGCTTGAATACTGTATTTACTTGCAC TCTTTCAGTACATCAAGATTCCTGTATATTTTAGAGTATAATAAAACACAGATGTGAGTTGTATTTAATGAATAA TGTATTTGTATCTGTGCATATTATCTACAAATCTATAAAGTTTCTAGGGCATTGACTACTAGATTTTAAGCATTT TTTCTAAAATATTTACAGAAATTATAAATCTAATCCCCCATCTTTTCTTTATAATATAAAGAAGTCATAATGAAC CCTTCCTAATTATTAGTAGTAGGAAGGTGAATATGCATTTTAATGACAGTGGACTACATTTTCTATTGTACCTTT TGAAAAAAAAAAAAATCAAGCAGATTCTAAAAGTATACATATGTGTGCTTTCTCTTTTCCTTTTAGGAATTCTCTT CTGAATTCCCTGAGGGAATTTTCTAGAATCTCAGAATTGAAAGAGACCTGAGGTTCATCCAGTCTCTAACCTCTT AACAAATGCAGGAGTCCCTTCTACAAGGGTGATCTTTCCACCTTGAACACTTCCAAGTGACTCTACCTCACCAAG TAACTTCTGTCTTTGGGCCTGGGTCTGTCCTCCAAGAGAACCCTGAGAATGTTGGAAGGATGAATCTCGCACATT TATTAGATTTACCACATCTAATGAAATCCAAGGTGTAGCTATAAAGTGACAAGCTGTTTTTAATTTATCACATAC ACCAGAACTTCTATCCTGCATCACTTATATGTAAATGATGCTGTTACCAAAAACATTAAGGTAGTTCTTGCGAAT GCCACCCACTAAGAAAACTATTTCATTACTTTTGTAATCCATCTGTGAGAGTCTGCCCCCCAGCTTAACCACTT CCTTTGGTCTGCACCCAATGAAGGGAAACCCCAAAGTACTGTCTCAAATGGTATTTGAACTACG

PCT/US2003/028547

FIGURE 1071

MVKLLLSRGANINAFDKKDRRAIHWAAYMGHIEVVKLLVSHGAEVTCKDKKSYTPLHAAASSGMISVVKYLLDLG VDMNEPNAYGNTPLHVACYNGQDVVVNELIDCGAIVNQKNEKGFTPLHFAAASTHGALCLELLVGNGADVNMKSK DGKTPLHMTALHGRFSRSQTIIQSGAVIDCEDKNGNTPLHIAARYGHELLINTLITSGADTAKRGIHGMFPLHLA ALSGFSDCCRKLLSSGFDIDTPDDFGRTCLHAAAAGGNLECLNLLLNTGADFNKKDKFGRSPLHYAAANCNYQCL FALVGSGASVNDLDERGCTPLHYAATSDTDGKCLEYLLRNDANPGIRDKQGYNAVHYSAAYGHRLCLQLIASETPLDVLMETSGTDMLSDSDNRATISPLHLAAYHGHHQALEVLVQSLLDLDVRNSSGRTPLDLAAFKGHVECVDVLIN QGASILVKDYILKRTPIHAAATNGHSECLRLLIGNAEPQNAVDIQDGNGQTPLMLSVLNGHTDCVYSLLNKGANV DAKDKWGRTALHRGAVTGHEECVDALLQHGAKCLLRDSRGRTPIHLSAACGHIGVLGALLQSAASMDANPATADN HGYTALHWACYNGHETCVELLLEQEVFQKTEGNAFSPLHCAVINDNEGAAEMLIDTLGASIVNATDSKGRTPLHA AAFTDHVECLQLLLSHNAQVNSVDSTGKTPLMMAAENGQTNTVEMLVSSASAELTLQDNSKNTALHLACSKGHET SALLILEKITDRNLINATNAALQTPLHVAARNGLTMVVQELLGKGASVLAVDENGYTPALACAPNKDVADCLALI LATMMPVSSSSPLSSLTFNAINRYTNTSKTVSFEALPIMRNEPSSYCSFNNIGGEQEYLYTDVDELNDSDSETY

PCT/US2003/028547

FIGURE 1072

GGGCGGGCCCACCGCTCCAGCGGCTGCTGTCAGGGGCCGCGAGGCTTTCCCTGAAGATGCAGCGTAGCATATTTT AGCCGGAGCGCCGGGCGCTGGGCGAGCGAGCGAGAGCGCGGCGGCGCGGGCTCCGGCGAGGGACAGACGCA CCCCGCGCCCCCCCCTCTGTATGGCACAAACTTTCCTCCCGGGACGCAACACGCTGCCTCAGGGAGCCCGCGACC GCGCCTTCTCCTCCGCCGGTCCCATACGCTGCTGAAATGGGTTGCGGATTGAACAAGTTAGAGAAACGTGATGAA CGCTTCCTGGAGTTCACGACTCTGAGTGCTGCGGAGCTCCCTGGGTCCTCAGCAGTGAGGCTGGCCTCCCTGCGT GACCTGCCCGCCCAGCTCCTGGAGCTGTACCAGCAGGCTTCTCGCTGGCGGCCCTGCACCCCTTCGTGCAGCCC ACCCATGAGCGGGAGAAGACGCCCCTGGAGCACATCTTAGAGCCATCCTGATCAAGAAAACCGACAGATCTCAG AAAACTGATCTTCACAATGAAGGCTACATCTTGGAATTAGATTGCTGTTCCTCCTTAGACCACCCGACAGACCAG AAACTCATCCCAGAGTTCATTAAGAAGATCCAGGAGGCTGCAAGCCAGGGCCTGAAATTCGTTGGTGTTATACCT CAGTACCATTCCTCTGTGAACTCGGCAGGCAGCAGTGCTCCGGTGTCTACTGCCAACAGCACCGAGGATGCCAGA GATGCAAAAAACGCACGTGGGGATCACGCGTCACTGGAGAATGAGAAACCGGGGACTGGGGATGTGTGCAGTGCT AACCCCTTGGAGGTGCATGAAGAGCCACTCTCAGGGAAAATGGAGATCTTCACCCTTTTCAACAAACCGAAGAGC CATCAGAAGTGCCGGCAATACTACCCTGTCACCATTCCTCTCCATGTCTCCAAGAATGGCCAGACAGTGAGCGGT TTGGACGCCAACTGGTTAGAGCACATGAGCGACCACTTCCGGAAAGGAGGCATGCTGGTGAACGCAGTCTTCTAC CTTGGAATAGTGAATGATTCCTTACATGGCTTGACAGATGGAGTATTCATCTTTGAAGCTGTTTCCACAGAAGAT ${\tt AGCAAAACCATACAGGGCTATGATGCTATTGTGGTTGAACAATGGACAGTCCTGGAAGGTGTCGAAGTGCAGACA}$ AAGACTACCAGCGAGGGGAGTGTATCCACCAAGCAGATTGTCTTCTTCAGAGACCTTGTCTACCTCAGAAAATC AAGAAGAAGGAATCGAAGTTTCAGTGGCGATTCTCCAGAGAAAATGCACAACAGGCAGATGAGGAAATCAAAA GGTAAACTCAGTGCCAGAGACAACAACAAGCAGAAGAAAATGAGAAGAACTTAGAAGACCAGTCTTCCAAAGCT GGAGACATGGGAAACTGTGTTTCAGGACAGCAGCAGGAGGGTGGAGTCTCCGAGGAGATGAAGGGCCCTGTCCAA GAGGACAAGGGAGAACAGCTGTCCCCTGGTGGCCTGCTGTGGGGGTGGGGTGGGGGTGAGGCTGTGCAGAAT GGTCCTGCCAGCCACAGCAGGGCCCTGGTGGGGATTTGCACTGGGCACTCCAATCCTGGAGAGGATGCCAGGGAC ${\tt GGGGATGCTGAGGAAGTCAGAGAGCTTGGTACGGTTGAAGAAAAC} {\tt \underline{TGA}} {\tt GTCTTGGGCAATTTGTGCTAAAACTAG}$ GTGAGTTGCCAAACCCAAGGCATCTTACCAACAGCTGGTTTGGGGGCTGGTTTCCCTGGTGTTGTGTTACCTA CCCTTTGGCTTGGCTTGACCTCCTTGTGAGCTCACCTGAGCCCTCCCAGGGCCAGGTTCCTGACAGTGTTGGT TTTTGCACATCCACTGGAAAGGTGTCATTAATGACCCAGTGTTAGAATGCAAGAGGTCAGGTTATTCTAGCCCTC ACAGGGCCTCCAGGGAGCATTCGGGTCAAATCCATGGACACCCTGGGCTACAAACCAAGGCTGCTGTTCATCCCA CATCGTGTGGGGCAGTGTCCATCCCCTGCAGCTACTTGGTGACTTAACAACTCCAGGAGCCCTGTCAGCTGCCCT CCTCCACCTAAACCCCTTCGACTCTTCTGCTTTGACAAAGAAAATGACATTGGGGAGGGGAGGTGCTCCGCCTCC CAGCTTTTCTCAAAATAGTCCTATAGATACTGGTAATCTGGAAATGAAGAAGTAATTCTGTCTCTGCACCTACTT TTGCAGAATGTTCAAGGAAGTATTCTGTGTTAGTATTAATGCCAAAAAGTTGTTTTTAAAGGTTTTGTACTCAGC AATCAGTGTAACATTGGTCAAGTTGTTACCCATGTATGCTGTGTTTATCATGTGTATATCGTCCAGAAAGTATTA ${\tt AGGCTTTAGGTAGATGCAACTGGCGAACCTTGGAGAGGGAATGCTGATTGTCTTGACCAAACCCACAGCCTGTCT}$ CTTCTCTTGTTTAGTTACTTACGGCAATAAATCATCTATGAGTT

PCT/US2003/028547

FIGURE 1073

MGCGLNKLEKRDEKRPGNIYSTLKRPQVETKIDVSYEYRFLEFTTLSAAELPGSSAVRLASLRDLPAQLLELYQQ GFSLAALHPFVQPTHEREKTPLEHIFRAILIKKTDRSQKTDLHNEGYILELDCCSSLDHPTDQKLIPEFIKKIQE AASQGLKFVGVIPQYHSSVNSAGSSAPVSTANSTEDARDAKNARGDHASLENEKPGTGDVCSAPAGRNQSPEPSS GPRGEVPLAKQPSSPSGEGDGGELSPQGVSKTLDGPESNPLEVHEEPLSGKMEIFTLFNKPKSHQKCRQYYPVTI PLHVSKNGQTVSGLDANWLEHMSDHFRKGGMLVNAVFYLGIVNDSLHGLTDGVFIFEAVSTEDSKTIQGYDAIVV EQWTVLEGVEVQTDYVPLLNSLAAYGWQLTCVLPTPVVKTTSEGSVSTKQIVFLQRPCLPQKIKKKESKFQWRFS REEMHNRQMRKSKGKLSARDKQQAEENEKNLEDQSSKAGDMGNCVSGQQQEGGVSEEMKGPVQEDKGEQLSPGGL LCGVGVEGEAVQNGPASHSRALVGICTGHSNPGEDARDGDAEEVRELGTVEEN

PCT/US2003/028547

FIGURE 1074

GCAATAGCACTAGAGTGCATCTATACCTGTGAACGAAATGATCAACTCTGTCTTTGCTATGACCTACTAGAATGT CTGCCAGAAAGAGGATATGGTGATAAGACAGAGGCAACCACAAAGCTTCATGACATGGTAGACCAACTGGAACAA ATTCTCAGTGTGTCAGAGCTTTTGGAAAAACATGGACTCGAGAAACCAATTTCATTTGTTAAAAACACTCAATCT AGCTCAGAAGAGGCACGCAAGCTGATGGTTAGATTGACGAGGCACACTGGCCGGAAGCAGCCTCCTGTCAGTGAG TCTCATTGGAGAACGTTGCTGCAAGACATGTTAACTATGCAGCAGAATGTATACACATGTCTAGATTCTGATGCC CACTGCAGTGCTTGTTCAGAAAATCCTCCAGCTGGTATAGCCCATAAAGGGAAACCCCACTACAGGGTCAGCTAC GAAAAGAGTATTGACTTGGTTTTGGCTGCCAGCAGAGAGTACTTCAATTCTTCTACCAACCTCACTGATAGCTGC CAAGCCGTTGGATGTCTTGAAGAATTTGGGGTAAAGATCCTGCCTTTTGCAAGTGCGATTGTGCCCTGATCGGATC AGTCTCATCAAGGAGTGTATTTCCCAGTCCCCCACATGCTATAAACAATCCACCAAGCTTCTGGGCCTTGCTGAG CTGCTGAGGGTTGCAGGTGAGAACCCAGAAGAAAGCGGGGACAGGTTCTAATCCTTTTAGTGGAGCAGGCACTTC GCTTCCATGACTACAAAGCAGCCAGTATGCATTGTCAGGAGCTGATGGCCACAGGTTATCCTAAAAGTTGGGATG TTTGTAGCCAGTTAGGACAATCAGAAGGTTACCAGGACTTGGCCACTCGTCAAGAGCTCATGGCTTTTGCTTTGA GAGTGAATTTCCAGATCCATCATGAAGGAGGGGAAAATATCAGTGCTTCACCATTAACTAGTAAAGCAGTACAAG AGGATGAAGTAGGTGTTCCAGGTAGCAATTCAGCTGACCTATTGCGCTGGACCACTGCTACCACCATGAAAGTCC TTTCCAACACCACAACCACCACCAAAGCGGTGCTGCAGGCCGTCAGTGATGGGCAGTGGTGGAAGAAGTCTTTAA CTTACCTTCGACCCCTTCAGGGGCAAAAATGTGGTGGTGCATATCAAATCGGAACTACAGCCAATGAAGATCTAG AGAAACAAGGGTGTCATCCTTTTTATGAATCTGTCATCTCAAATCCTTTTGTCGCTGAGTCTGAAGGGACCTATG ACACCTATCAGCATGTTCCAGTGGAAAGCTTTGCAGAAGTATTGCTGAGAACTGGAAAATTGGCAGAGGCTAAAA ATAAAGGAGAAGTATTTCCAACAACTGAAGTTCTCTTGCAACTAGCAAGTGAAGCCTTGCCAAATGACATGACCT TGGCTCTTGCTTACCTTCTTGCCTTACCACAAGTGTTAGATGCTAACCGGTGCTTTGAAAAGCAGTCCCCCTCTG CATTATCTCTCCAGCTGGCAGCGTATTACTATAGCCTCCAGATCTATGCCCGATTGGCCCCATGTTTCAGGGACA AGTGCCATCCTCTTTACAGGGCTGATCCCAAAGAACTAATCAAGATGGTCACCAGGCATGTGACTCGACATGAGC ACGAAGCCTGGCCTGAAGACCTTATTTCACTGACCAAGCAGTTACACTGCTACAATGAACGTCTCCTGGATTTCA CTCAGGCGCAGATCCTTCAGGGCCTTCGGAAGGGTGTGGACGTGCAGCGGTTTACTGCAGATGACCAGTATAAAA GGGAAACTATCCTTGGTCTGGCAGAAACTCTAGAGGAAAGCGTCTACAGCATTGCTATTTCTCTGGCACAACGTT ACAGTGTCTCCCGCTGGGAAGTTTTTATGACCCATTTGGAGTTCCTCTTCACGGACAGTGGTTTGTCCACACTAG AAATTGAAAATAGAGCCCAAGACCTTCATCTCTTTGAGACTTTGAAGACTGATCCAGAAGCCTTTCACCAGCACA TGGTCAAGTATATTTACCCTACTATTGGTGGCTTTGATCACGAAAGGCTGCAGTATTATTTCACTCTTCTGGAAA ACTGTGGCTGTGCAGATTTGGGGAACTGTGCCATTAAACCAGAAACCCACATTCGACTGCTGAAGAAGTTTAAGG TTGTTGCATCAGGTCTTAATTACAAAAAGCTGACAGATGAAAACATGAGTCCTCTTGAAGCATTGGAGCCAGTTC TTTCAAGTCAAAATATCTTGTCTATTTCCAAACTTGTTCCCAAAATCCCTGAAAAGGATGGACAGATGCTTTCCC CAAGCTCTCTGTACACCATCTGGTTACAGAAGTTGTTCTGGACTGGAGACCCTCATCTCATTAAACAAGTCCCAG GCTCTTCACCGGAGTGGCTTCATGCCTATGATGTCTGCATGAAGTACTTTGATCGTCTCCACCCAGGTGACCTCA CTAGAAAGGCTATTAAGACAGTCAAACATTTTATTGAGAAGCCAAGGAAAAGAAACTCAGAAGACGAAGCTCAAG AAGCTAAGGATTCTAAAGTTACCTATGCAGATACTTTGAATCATCTGGAGAAATCACTTGCCCACCTGGAAACCC TGAGCCACAGCTTCATCCTTTCTCTGAAGAATAGTGAGCAGGAAACACTGCAAAAATACAGTCACCTCTATGATC TGTCCCGATCAGAAAAAGAGAAACTTCATGATGAAGCTGTGGCTATTTGTTTAGATGGTCAGCCTCTAGCAATGA TTCAGCAGCTGCTAGAGGTGGCAGTTGGCCCTCTTGACATCTCACCCAAGGATATAGTGCAGAGTGCAATCATGA **AAATAATTTCTGCATTGAG**

PCT/US2003/028547

FIGURE 1075

PCT/US2003/028547

FIGURE 1076

CCTTTCCGTCTGGCGGCAGCCATCAGGTAAGCCAAGATGGGTGCATACAAGTACATCCAGGAGCTATGGAGAAAG AAGCAGTCTGATGTCATGCGCTTTCTTCTGAGGGTCCGCTGCTGGCAGTACCGCCAGCTCTCTGCTCTCCACAGG ATTCGTGTTCGCCGTGGTGGCCGAAAACGCCCAGTTCCTAAGGGTGCAACTTACGGCAAGCCTGTCCATCATGGT AGAGTCCTGAATTCTTACTGGGTTGGTGAAGATTCCACATACAAATTTTTTGAGGTTATCCTCATTGATCCATTC CATAAAGCTATCAGAAGAAATCCTGACACCCAGTGGATCACCAAACCAGTCCACAAGCACAGGGAGATGCGTGGG CTGACATCTGCAGGCCGAAAGAGCCGTGGCCTTGGAAAGGGCCACAAGTTCCACCACACTATTGGTGGCTCTCGC CGGGCAGCTTGGAGAAGGCGCAATACTCTCCAGCTCCACCGTTACCGC<u>TAA</u>TATAAGTAAAGTTTGTAAAATTCA TACTTAATAAACAATTTAGGACAGTCATGTCTGCTTACAGGTGTTATTTGTCTGTTAAAACTAGTCTGCAGATGT TTCTTGAATGCTTTGTCAAATTAAGAAAGTTAAAGTGCAATAATGTTTGAAGACAATAAGTGGTGGTGTATCTTG TTTCTAATAAGATAAACTTTTTTGTCTTTGCTTTATCTTATTAGGGAGTTGTATGTCAGTGTATAAAACATACTG TGTGGTATAACAGGCTTAATAAATTCTTTAAAAGGAGAGAACTGAAACTAGCCCTGTAGATTTGTCTGGTGCATG GTTTGGCAGGTGTAGACTTTTTAAGTTGGGCTTTAGAAAATCTGGGTTAGCCTGAAGAAATTGCCTCAGCCTCC ACAGTACCATTTTAAATTCACATAAAAGGTGAAAGCTCCTGGTTCAGTGCCATGGCTTCATGGCATTCAGTGATT AGTGGTAATGGTAAACACTGGTGTTTTTGAAGTTGAATGTGCGATAAAATTATTAGCCTTAAGATTGGTAAGCT AGCAATGAATGCTAGGGTGGGAAGCTGGTGAGCCAGTGGCCATTAGATAAATACCTTTCAAGTGTGAGCTTAGAC GTCAACCCTAAAATACTTAACCGTAATGCTAATTGTGATCATTATGAATCCCTTCAGTCACATTAGGGGGAAAGT AGTTGGCTATAAGTACGTCATTCTTAGTCCAGTCAGTCTTAAAAACATCTTGGGTTACCCACTCTGTCCACTCCC ATAGGCTACAGAAAAAGTCACAAGCGCATGGTTTCCAACCATATGTGTTTTCTGCAGTTATTTCTCTTGTTCTGG CCAAACAACCCTAAAAATCCTTACCATTCCACAAAGTTGGACCATCACTTGTGCACCCACTTTGACTATGAGTAT ACCACCACATTGCATTTCTGTTTGCACCATGTCTTCCAGGAGACTAGACTACTGTTGTCCAGGGTCAATTTGAGT GTAAAGAAATGTAGACAAGGAATTGCCCAATTTTAAATTCTGACTTTGCTGACTTAATTTAAATGCTCGTTCTG AACCAATTTTCTCCTATCTTCTCTAGGGGTTTCAAAAGACTCAGTTAATTGATTTCCAGGAAGTACTCATAGCAA

PCT/US2003/028547

FIGURE 1077

MGAYKYIQELWRKKQSDVMRFLLRVRCWQYRQLSALHRAPRPTRPDKARRLGYKAKQGYVIYRIRVRRGGRKRPV PKGATYGKPVHHGVNQLKFARSLQSVAEERAGRHCGALRVLNSYWVGEDSTYKFFEVILIDPFHKAIRRNPDTQW ITKPVHKHREMRGLTSAGRKSRGLGKGHKFHHTIGGSRRAAWRRRNTLQLHRYR

PCT/US2003/028547

FIGURE 1078

GTGACAGAAGTAGTAGGAAGTGAGCTGTTCAGAGGCAGGAGGGTCTATTCTTTGCCAAAGGGGGGACCAGAATTC GGGTAGGATCCGGAACGCATTCGGAAGGCTTTTTGCAAGCATTTACTTGGAAGGAGAACTTGGGATCTTTCTGGG AACCCCCGCCCGGCTGGATTGGCCGAGCAAGCCTGGAAAATGGTAAATGATCATTTGGATCAATTACAGGCTT TTAGCTGGCTTGTCTGTCATAATTCATGATTCGGGGCTGGGAAAAAGACCAACAGCCTACGTGCCAAAAAAGGGG CAGAGTTTGATGGAGTTGGGTGGACTTTTCTATGCCATTTGCCTCCACACCTAGAGGATAAGCACTTTTGCAGAC ATTCAGTGCAAGGGAGATCATGTTTGACTGTATGGATGTTCTGTCAGTGAGTCCTGGGCAAATCCTGGATTTCTA CACTGCGAGTCCGTCTTCCTGCATGCTCCAGGAGAAAGCTCTCAAAGCATGCTTCAGTGGATTGACCCAAACCGA ATGGCAGCATCGGCACACTGCTCAATCAATTGAAACACAGAGCACCAGCTCTGAGGAACTCGTCCCAAGCCCCCC ATCTCCACTTCCTCCCCTCGAGTGTACAAACCCTGCTTCGTCTGCCAGGACAAATCATCAGGGTACCACTATGG GGTCAGCGCCTGTGAGGGATGTAAGGGCTTTTTCCGCAGAAGTATTCAGAAGAATATGATTTACACTTGTCACCG AGATAAGAACTGTGTTATTAATAAAGTCACCAGGAATCGATGCCAATACTGTCGACTCCAGAAGTGCTTTGAAGT GGGAATGTCCAAAGAATCTGTCAGGAATGACAGGAACAAGAAAAAGAAGGAGACTTCGAAGCAAGAATGCACAGA GAGCTATGAAATGACAGCTGAGTTGGACGATCTCACAGAGAAGATCCGAAAAGCTCACCAGGAAACTTTCCCTTC ACTCTGCCAGCTGGGTAAATACACCACGAATTCCAGTGCTGACCATCGAGTCCGACTGGACCTGGGCCTCTGGGA CAAATTCAGTGAACTGGCCACCAAGTGCATTATTAAGATCGTGGAGTTTGCTAAACGTCTGCCTGGTTTCACTGG GTATACCCCAGAACAAGACACCATGACTTTCTCAGACGGCCTTACCCTAAATCGAACTCAGATGCACAATGCTGG ATTTGGTCCTCTGACTGACCTTGTGTTCACCTTTGCCAACCAGCTCCTGCCTTTGGAAATGGATGACACAGAAAC AGGCCTTCTCAGTGCCATCTGCTTAATCTGTGGAGACCGCCAGGACCTTGAGGAACCGACAAAAGTAGATAAGCT ACAAGAACCATTGCTGGAAGCACTAAAAATTTATATCAGAAAAAGACGACCCAGCAAGCCTCACATGTTTCCAAA GATCTTAATGAAAATCACAGATCTCCGTAGCATCAGTGCTAAAGGTGCAGAGCGTGTAATTACCTTGAAAATGGA AATTCCTGGATCAATGCCACCTCTCATTCAAGAAATGCTGGAGAATTCTGAAGGACATGAACCCTTGACCCCAAG ACCACTCGTGCAATAAGACATTTCTAGCTACTTCAAACATTCCCCAGTACCTTCAGTTCCAGGATTTAAAATGC AAGAAAAACATTTTTACTGCTGCTTAGTTTTTGGACTGAAAAGATATTAAAACTCAAGAAGGACCAAGAAGTTT TCATATGTATCAATATATACTCCTCACTGTGTAACTTACCTAGAAATACAAACTTTTCCAATTTTAAAAAAATC AGCCATTTCATGCAACCAGAAACTAGTTAAAAGCTTCTATTTTCCTCTTTGAACACTCAAGATTGCATGGCAAAG TATACTGTATGTTTGGTGCTTTCCTTTTGTCTTGCATACTCAAAATAACCATGACACCAAGGTTATGAAATAGAC TACTGTACACGTCTACCTAGGTTCAAAAAGATAACTGTCTTGCTTTCATGGAATAGTCAAGACATCAAGGTAAGG AAGCTTGTCTTTGCTCTTTCTGATGCTCTCAAACTGCATCTTTTATTTCATGTTGCCCAGTAAAAGTATACAAAT TCCCTGCACTAGCAGAAGAGAATTCTGTATCAGTGTAACTGCCAGTTCAGTTAATCAAATGTCATTTGTTCAATT TTTTTACAGTAATGATAGCCTCCAAGGCAGAAACACTTTTCAGTGTTAAGTTTTTGTTTACTTGTTCACAAGCCA AAACAGGCATAGAATCTGCCTCCTTTGACCTTGTTCAATCACTATGAAGCAGAGTGAAAGCTGTGGTAGAGTGGT

PCT/US2003/028547

FIGURE 1079A

ATGCCCAAGTCGGGTGGCTGCGCGCGGGAGCCGGCGTGGGCGGCGCAACGGGGCACTGACCTGGGTGAACAAT GCTGCAAAAAAAGAAGATCAGAAACTGCCAACAAAAATGATTCTTCAAAGAAGTTGTCTGTTGAGAGAGTGTAT CAGAAGAAGACACATTGAACACATTCTTCTTCGTCCTGATACATATATTGGGTCAGTGGAGCCATTGACGCAG TTCATGTGGGTGTATGATGAAGATGTAGGAATGAATTGCAGGGAGGTTACCTTTGTGCCAGGTTTATACAAGATC TTTGATGAAATTTTGGTTAATGCTGCTGACAATAAACAGAGGGATAAGAACATGACTTGTATTAAAGTTTCTATT GATCCTGAATCTAACATTATAAGCATTTGGAATAATGGGAAAGGCATTCCAGTAGTAGAACACAAGGTAGAAAA GTTTATGTTCCTGCTTTAATTTTTGGACAGCTTTTAACATCCAGTAACTATGATGATGATGAAAAAAAGTTACA GGTGGTCGTAATGGTTATGGTGCAAAACTTTGTAATATTTTCAGTACAAAGTTTACAGTAGAAACAGCTTGCAAA GAATACAAACACAGTTTTAAGCAGACATGGATGAATAATATGATGAAGACTTCTGAAGCCAAAATTAAACATTTT GATGGTGAAGATTACACATGCATAACATTCCAACCAGATCTGTCCAAATTTAAGATGGAAAAACTTGACAAGGAT ATTGTGGCCCTCATGACTAGAAGGGCATATGATTTGGCTGGTTCGTGTAGAGGGGGTCAAGGTCATGTTTAATGGA AAGAAATTGCCTGTAAATGGATTTCGCAGTTATGTAGATCTTTATGTGAAAGACAAATTGGATGAAACTGGGGTG GCCCTGAAAGTTATTCATGAGCTTGCAAATGAAAGATGGGATGTTTGTCTCACATTGAGTGAAAAAGGATTCCAG CAAATCAGCTTTGTAAATAGTATTGCAACTACAAAAGGTGGACGGCACGTGGATTATGTGGTAGATCAAGTTGTT GGTAAACTGATTGAAGTAGTTAAGAAAAAGAACAAAGCTGGTGTATCAGTGAAACCATTTCAAGTAAAAAACCAT ATATGGGTTTTTATTAATTGCCTTATTGAAAATCCAACTTTTGATTCTCAGACTAAGGAAAACATGACTCTGCAG CCCAAAAGTTTTGGGTCTAAATGCCAGCTGTCAGAAAAATTTTTTTAAAGCAGCCTCTAATTGTGGCATTGTAGAA AGTATCCTGAACTGGGTGAAATTTAAGGCTCAGACTCAGCTGAATAAGAAGTGTTCATCAGTAAAATACAGTAAA ATCAAAGGTATTCCCAAACTGGATGATGCTAATGATGCTGGTGGTAAACATTCCCTGGAGTGTACACTGATATTA ACAGAGGGAGACTCTGCCAAATCACTGGCTGTGTCTGGATTAGGTGTGATTGGACGAGACAGATACGGAGTTTTT ATTATTAAAATAGTTGGTCTACAATATAAGAAAAGTTACGATGATGCAGAATCTCTGAAAACCTTACGCTATGGA CAGGAACTTTCCTTCTACAGTATTCCTGAATTTGACGAATGGAAAAAACATATAGAAAACCAGAAAGCCTGGAAA ATAAAGTACTATAAAGGATTGGGTACTAGTACAGCTAAAGAAGCAAAGGAATATTTTGCTGATATGGAAAGGCAT CGCATCTTGTTTAGATATGCTGGTCCTGAAGATGATGCTGCCATTACCTTGGCATTTAGTAAGAAGAAGATTGAT GACAGAAAAGAATGGTTAACAAATTTTATGGAAGACCGGAGACAGCGTAGGCTACATGGCTTACCAGAGCAATTT GGAGAACAAGCATTGATGATGACTATTGTGAATTTGGCTCAGAACTTTGTGGGAAGTAACAACATTAACTTGCTT CAGCCTATTGGTCAGTTTGGAACTCGGCTTCATGGTGGCAAAGATGCTGCAAGCCCTCGTTATATTTTCACAATG TTAAGCACTTTAGCAAGGCTACTTTTTCCTGCTGTGGATGACAACCTCCTTAAGTTCCTTTATGATGATAATCAA CGTGTAGAGCCTGAGTGGTATATTCCTATAATTCCCATGGTTTTAATAAATGGTGCTGAGGGCATTGGTACTGGA TGGGCTTGTAAACTACCCAACTATGATGCTAGGGAAATTGTGAACAATGTCAGACGAATGCTAGATGGCCTGGAT CCTCATCCCATGCTTCCAAACTACAAAAACTTTAAAGGCACGATTCAAGAACTTGGTCAAAAACCAGTATGCAGTC AGTGGTGAAATATTTGTAGTGGACAGAAACACAGTAGAAATTACAGAGCTTCCAGTTAGAACTTGGACACAGGTA TATAAAGAACAGGTTTTAGAACCTATGCTAAATGGAACAGATAAAACACCAGCATTAATTTCTGATTATAAAGAA TATCATACTGACACAACTGTGAAATTTGTGGTGAAAATGACTGAAGAGAAACTAGCACAAGCAGAAGCTGCTGGA CTGCATAAAGTTTTTAAACTTCAAACTACTCTTACTTGTAATTCCATGGTACTTTTTGATCATATGGGATGTCTG AAGAAATATGAAACTGTGCAAGACATTCTGAAAGAATTCTTTGATTTACGATTAAGTTATTACGGTTTACGTAAG GAGTGGCTTGTGGGAATGTTGGGAGCAGAATCTACAAAGCTTAACAATCAAGCCCGTTTCATTTTAGAGAAGATA CAAGGGAAAATTACTATAGAGAATAGGTCAAAGAAAGATTTGATTCAAATGTTAGTCCAGAGAGGTTATGAATCT GACCCAGTGAAAGCCTGGAAAGAAGCACAAGAAAAGGCAGCAGAAGAGGGATGAAACCAAAAACCAGCATGATGAT AGTTCCTCCGATTCAGGAACTCCTTCAGGCCCAGATTTTAATTATATTTTAAATATGTCTCTGTGGTCTCTTACT AAAGAAAAAGTTGAAGAACTGATTAAACAGAGAGATGCAAAAGGGCGAGAGGTCAATGATCTTAAAAGAAAATCT CCTTCAGATCTTTGGAAAGAGGATTTAGCGGCATTTGTTGAAGAACTGGATAAAGTGGAATCTCAAGAACGAGAA

PCT/US2003/028547

FIGURE 1079B

GATGTTCTGGCTGGAATGTCTGGAAAAGCAATTAAAGGTAAAGTTGGCAAACCTAAGGTGAAGAAACTCCAGTTG GAAGAGACAATGCCCTCACCTTATGGCAGAAGAATAATTCCTGAAATTACAGCTATGAAGGCAGATGCCAGCAAA AAGTTGCTGAAGAAGAAGAAGGGTGATCTTGATACTGCAGCAGTAAAAGTGGAATTTGATGAAGAATTCAGTGGA AAACGGAATCCTTGGTCAGATGATGAATCCAAGTCAGAAAGTGATTTGGAAGAAACAGAACCTGTGGTTATTCCA AGAGATTCTTTGCTTAGGAGAGCAGCCGAAAGACCTAAATACACATTTGATTTCTCAGAAGAAGAGGATGAT GATGCTGATGATGATGATGACAATAATGATTTAGAGGAATTGAAAGTTAAAGCATCTCCCATAACAAATGAT GGGGAAGATGAATTTGTTCCTTCAGATGGGTTAGATAAAGATGAATATACATTTTCACCAGGCAAATCAAAAGCC ACTCCAGAAAAATCTTTGCATGACAAAAAAAGTCAGGATTTTGGAAATCTCTTCATTTCCTTCATATTCTCAG AAGTCAGAAGATGATTCAGCTAAATTTGACAGTAATGAAGAAGATTCTGCTTCTGTTTTTTCACCATCATTTGGT CTGAAACAGACAGATAAAGTTCCAAGTAAAACGGTAGCTGCTAAAAAGGGAAAACCGTCTTCAGATACAGTCCCT AAGCCCAAGAGAGCCCCAAAACAGAAGAAAGTAGTAGAGGCTGTAAACTCTGACTCGGATTCAGAATTTGGCATT CCAAAGAAGACTACAACACCAAAAGGTAAAGGCCGAGGGGCAAAGAAAAGGAAAGCATCTGGCTCTGAAAATGAA TCAGATGTGGACATCTTCCCCTCAGACTTCCCTACTGAGCCACCTTCTCTGCCACGAACCGGTCGGGCTAGGAAA GAAGTAAAATATTTTGCAGAGTCTGATGAAGAAGAAGATGATGTTGATTTTGCAATGTTTAAT<u>TAA</u>GTGCCCAAA GAGCACAAACATTTTTCAACAAATATCTTGTGTTGTCCTTTTGTCTTCTGTCTCAGACTTTTGTACATCTGGC TTATTTTAATGTGATGATGTAATTGACGGTTTTTTATTATTGTGGTAGGCCTTTTAACATTTTGTTCTTACACAT ACAGTTTTATGCTCTTTTTTACTCATTGAAATGTCACGTACTGTCTGATTGGCTTGTAGAATTGTTATAGACTGC CGTGCATTAGCACAGATTTTAATTGTCATGGTTACAAACTACAGACCTGCTTTTTGAAATGAAATTTAAACATTA AAAATGGAACTGTG

PCT/US2003/028547

1159/6881 FIGURE 1080

MAKSGGCGAGAGVGGGNGALTWVNNAAKKEESETANKNDSSKKLSVERVYQKKTQLEHILLRPDTYIGSVEPLTQ FMWVYDEDVGMNCREVTFVPGLYKIFDEILVNAADNKQRDKNMTCIKVSIDPESNIISIWNNGKGIPVVEHKVEK VYVPALIFGQLLTSSNYDDDEKKVTGGRNGYGAKLCNIFSTKFTVETACKEYKHSFKQTWMNNMMKTSEAKIKHF DGEDYTCITFQPDLSKFKMEKLDKDIVALMTRRAYDLAGSCRGVKVMFNGKKLPVNGFRSYVDLYVKDKLDETGV ALKVIHELANFRWDVCLTLSEKGFQQISFVNSIATTKGGRHVDYVVDQVVGKLIEVVKKKNKAGVSVKPFQVKNH IWVFINCLIENPTFDSQTKENMTLQPKSFGSKCQLSEKFFKAASNCGIVESILNWVKFKAQTQLNKKCSSVKYSK IKGIPKLDDANDAGGKHSLECTLILTEGDSAKSLAVSGLGVIGRDRYGVFPLRGKILNVREASHKQIMENAEINN IIKIVGLQYKKSYDDAESLKTLRYGKIMIMTDQDQDGSHIKGLLINFIHHNWPSLLKHGFLEEFITPIVKASKNK QELSFYSIPEFDEWKKHIENQKAWKIKYYKGLGTSTAKEAKEYFADMERHRILFRYAGPEDDAAITLAFSKKKID DRKEWLTNFMEDRRORRLHGLPEOFLYGTATKHLTYNDFINKELILFSNSDNERSIPSLVDGFKPGQRKVLFTCF KRNDKREVKVAQLAGSVAEMSAYHHGEQALMMTIVNLAQNFVGSNNINLLQPIGQFGTRLHGGKDAASPRYIFTM LSTLARLLFPAVDDNLLKFLYDDNORVEPEWYIPIIPMVLINGAEGIGTGWACKLPNYDAREIVNNVRRMLDGLD PHPMLPNYKNFKGTIQELGQNQYAVSGEIFVVDRNTVEITELPVRTWTQVYKEQVLEPMLNGTDKTPALISDYKE YHTDTTVKFVVKMTEEKLAQAEAAGLHKVFKLQTTLTCNSMVLFDHMGCLKKYETVQDILKEFFDLRLSYYGLRK ${\tt EWLVGMLGAESTKLNNQARFILEKIQGKITIENRSKKDLIQMLVQRGYESDPVKAWKEAQEKAAEEDETQNQHDD}$ SSSDSGTPSGPDFNYILNMSLWSLTKEKVEELIKQRDAKGREVNDLKRKSPSDLWKEDLAAFVEELDKVESQERE DVLAGMSGKA1KGKVGKPKVKKLQLEETMPSPYGRRIIPEITAMKADASKKLLKKKKGDLDTAAVKVEFDEEFSG APVEGAGEEALTPSVPINKGPKPKREKKEPGTRVRKTPTSSGKPSAKKVKKRNPWSDDESKSESDLEETEPVVIP TPEKSLHDKKSQDFGNLFSFPSYSQKSEDDSAKFDSNEEDSASVFSPSFGLKQTDKVPSKTVAAKKGKPSSDTVP KPKRAPKQKKVVEAVNSDSDSEFGIPKKTTTPKGKGRGAKKRKASGSENEGDYNPGRKTSKTTSKKPKKTSFDQD SDVDIFPSDFPTEPPSLPRTGRARKEVKYFAESDEEEDDVDFAMFN

PCT/US2003/028547

1160/6881 FIGURE 1081

GAGAAGGCCCAGGAAGTGACGGCCGCCTCCCGGCTACCGGGGACTTCTGGAGTCCGAGAAGTCAACGGCGCGGTT CGGGCCCCGCCAGAGGCCCCCGGAGCGCCTCCCTACTTTTCATGGGCCGGCTCCCATTGCTCCGGCGCG TTCTCAAGGGCTTGCAGCTGTTGCTGTCTCTGCTGGCCTTCATCTGTGAAGAAGTTGTATCACAATGTACTTTAT GTGGAGGACTTTATTTTTTGAGTTTGTAAGCTGCAGTGCCTTTCTTCTGAGTCTCCTTATACTGATTGTGTATT GCACTCCATTTTATGAGAGAGTTGATACCACAAAAGTAAAATCATCGGATTTTTATATTACTTTGGGAACAGGAT GTGTGTTTTTGTTGGCATCCATCATTTTTGTTTCCACACATGACAGGACTTCAGCTGAGATTGCTGCAATTGTGT TTGGATTTATAGCAAGTTTTATGTTCCTACTTGACTTTATCACTATGCTGTATGAAAAACGACAGGAGTCCCAGC TGAGAAAACCTGAAAATACCACTAGGGCTGAAGCCCTCACTGAGCCACTTAATGCC<u>TAA</u>AGACTCTGGGGAGCAG ATGTTACCTAAGGTAGTGACCCTGCATTGTGGTGCCTGAGCCCTGGCAGAAGCTCTTGTAAAATTTGTTAATTGT GTAGGCCAGATAAGTTAAAAAAAATTTTTTTTTAAATAATTGAAACTTATCTCAAATGGAGATTTTGGTGGG AGGAGGAGAAAACAATTGTTTTTAAATCACACAGCTCAACGGTTGATAAATGATTCTGTCATTCTGTTACAGGTC ATTCTTTTACTAGGCTTAGCTTCCAAATTATGCTTTATAGCTGTATAAACATCGTGATTATATTCATCTACTTAG TAACATATTTAAGAAACCAATATTTAAAATGTTGGTCTAGGTTTTTTTCCTTAACATATATTACCAGGCTTTACT GTATTTCACTCAGCCTTAAATGTTATAATATTTTTGGATAACGGTTATTAATTCTTTGAGACCTTCGTATAGCCT ATAAAATGTATGGGAGATGTTGGTATTTATGTGTATAAAAGCAACAATATCAGCAACTTCGTGTTTATACTGCA CCTTGGTTGTTGATGTCAAGTAAAAAAAAAAGATTGTTTTGTAACACATAAAAAAATGGAAGAAACTGATACCACAC CTAAGGACCAAAGATAAGAAAGACTTTTTGCCCAAGACAGTGAAAGTAATTATAAAAACAAGCTTTGACCACTTA CCAAGTATCTGAAGAGATGAGTTCATACTATGATTTAGAAAGTGGTTCGATTCCCCTGTTGGCATATGATTATTT TTACTAAAATTAATACAGCTCTGTGGGTCTTCCTTAGTGTTTTCTTTGAAGCCAATCTGTTTTTTTAGGACACC TGCTTCATCTAGCAGAGGTTGGCCTCTGGCTCTGACACTTTTTGTCAGTTGTCTTTAGGTGGTCCTGAATCTTGG GCCCTTTTGATTGTGAATACTGTGTAGCAGGATCTTGAGAGTCCTTGTTCTTACATAGGCATTGCTCTAGTTTGT CTTTGGCAAAAAAAAAAAAAAAAAAAAAA

PCT/US2003/028547

FIGURE 1082

MENGAVYSPTTEEDPGPARGPRSGLAAYFFMGRLPLLRRVLKGLQLLLSLLAFICEEVVSQCTLCGGLYFFEFVS CSAFLLSLLILIVYCTPFYERVDTTKVKSSDFYITLGTGCVFLLASIIFVSTHDRTSAEIAAIVFGFIASFMFLL DFITMLYEKRQESQLRKPENTTRAEALTEPLNA

PCT/US2003/028547

FIGURE 1083

ATGGATGCTGTGTGCTATGGTGAAGCTGTTTCTTCCCAGCAGCAGGAGAAAAAGGAGAAAAAGGAAAAACACAAG
AAGAAATGCGTGGTGCAGAGCCTCAATTCCTACTTCATGGATGTGAAATGCCCAGGATGCTATAAAATCACTACA
GCAGTTTCTAATTCCTGCAATTTTCCCCTTAATGGCTCTCCGGATGTTGCCACTGATTATGGTGCCGTTCATGGC
TCTTCAGCAGGTGCTGGGCATAGGCACCAGGAAGCCCTGTTTAATAGTGTGTCTCCCTTTACATGCTCCC
TCGGGTGAAGCAAGGCAGATGGAGAAGGCTTTAGCAGACAGCGTGGGCATGTTTCCAAGCCCTCAGGCTGAG
CAACAATGCCGATGCCAGCACCAACAGGCTGAGGTGGCTTCTTCATTTTAG

PCT/US2003/028547

1163/6881 FIGURE 1084

 ${\tt MDAVCYGEAVSSQQQGEKKEKRKHKKKCVVQSLNSYFMDVKCPGCYKITTAVSNSCNFPLNGSPDVATDYGAVHGSSAGAGHRHQEALFNSVSAFPLHAPSGEARQMEKALADSVGMFPSPQAAEQQCRCQHQQAEVASSF}$

PCT/US2003/028547

FIGURE 1085

GCTAAAGGTGATGTGGCCGCCCTCAACCGACGCATCCAGCTCGTTGAGGAGAAGTTGGACAGGGCTCAGGAAAGA CTGGCCACGGCCCCGCAGAAGCTGGAGGGAGGCAGAAAAAGCTGCAGATGAGAGTGAGAGAGGAATGAAGGTGATA GAAAACCGGGCCATGAAGGATGAGGAGAAGATGGAAATTCAGGAGCTGCAGCTCAAAGAGGCCCAAGCACATTGCG GAAGAGGCTGACCGCAAATACTGGGAGGTAGCTCGTAAGCTGGTCTTCCTGGAGGGTGAGCTGGAGAGGGCAGAG GAGCGTGTGGAGGTGTCTGAACTAAAATGTGGTGACCTTGAAGAAGAACTCAAGAATGTTACTAACAATCTGAAA TCTCTGGAGGCTGCGTCTGAAAAGTATTCTGAAAAGGAGGACAAATGTGAAGAAGAAATTAAACTTCTGTGTGAC AAACTGAAAGAGGCTGAGACCCGTGCTGAATTTGCAGAGAGAACGGTTGCAAAACTGGAAAAGACAATTGATGAC CTGGAAGAGAACTTGCCCAGGCCAAAGAAGAAGAGCGTGGGCTTACATCAGACACTGGATCAGACACTAAACGAG CTTAACTGTATATAAGCAAAACAGAAGAGTCTTGTTCCAACAGAAACTCCGGAGCTCCGTGGGTCTTTCTCTTCT CTTGTAAGAAGTTCCTTTTGTTATTGCCATCTTCGCTTTGCTGGAAATGTCAAGCAAATTATGAATACATGACCA TTTTTCAGCTCTCTTATTTTTTCCTTAAGTTGCATTTATTCCTAAGGTAGGCAGGGTATTTCCTAGTAAGCATAG TTTCTTAAGACAGAGGCCATTTGGTTCCTGGGAGAATAGGCAGCCCCACACTTTGAAGAACACAGACCCCAGTAT CTAGTCGTGGATATGATTAAAACGCTGAAGACCACAACCTTTTGGGTCAACTGTTGGTCAAACTATAGGAGAGAC CAGGGACCACCCCACTCCTATTTATTCAGCACCACACTACCCAGGAAATACACTAGCAAATTGTGCAATGGAATA AAATCCACACTTTACTTTAGATTCTTGCAACTGTATCATATGTAATAGTATCACTTTTTCTACATTTTGGTCAAA TAAATTTTTACATAAACTAC

PCT/US2003/028547

FIGURE 1086

TGGGTCTCGCGCGCGTATTGCTGGGTAACGGGCCTTCTCCCGCGTCGGCCCGGCCCCTCCTGCCTCGGCTCGTCC TCGGTCCGTTTCCAAACACTAAGGAATCGAAACTCGGCGGCCTTGGGGGGCGGCCCTACGTAGCCTGGCTTCTGGT TGTCATGCATGCACTGGTAGAAGATGATATCTGTATTCTGAATCATGAAAAAGCCCATAAGAGAGATACAGTGAC CCCAGTTTCAATATATTCAGGAGATGAATCTGTTGCTTCCCATTTTGCTCTTGTCACTGCATATGAAGACATCAA AAAACGACTTAAGGATTCAGAGAAAGAGAACTCTTTGTTAAAGAAGAGAATAAGATTTTTGGAAGAAAAGCTAAT AGCTCGATTTGAAGAAGAACAAGTTCCGTGGGACGAGAACAAGTAAATAAGGCCTATCATGCATATCGAGAGGT TTGCATTGATAGAGATAATTTGAAGAGCAAACTGGACAAAATGAATAAAGACAACTCTGAATCTTTGAAAGTATT GAATGAGCAGCTACAATCTAAAGAAGTAGAACTCCTCCAGCTGAGGACAGAGGTGGAAACTCAGCAGGTGATGAG GAATTTAAATCCACCTTCATCAAACTGGGAGGTGGAAAAGTTGAGCTGTGACCTGAAGATCCATGGTTTGGAACA GGAACTGAAGAGAGAAATGTCTAATTTACATCTGGTGACTCAAGTACAAGCTGAACTACTAAGAAAACTGAAAAC CTCAACTGCAATCAAGAAAGCCTGTGCCCCTGTAGGATGCAGTGAAGACCTTGGAAGAGACAGCACAAAACTGCA CTTGATGAATTTTACTGCAACATACACAAGACATCCCCCTCTCTTACCAAATGGCAAAGCTCTTTGTCATACCAC ATCCATTCCTAATGATGGTACATGCTTTCAGGAACACAGTTCTTATGGCAGAAATTCTCTGGAAGACAATTCCTG GGTATTTCCAAGTCCTCCTAAATCAAGTGAGACAGCATTTGGGGAAACTAAAACTAAAACTTTGCCTTTACCCAA $\texttt{CCTTCCACCACTGCATTACTTGGATCAACATAATCAGAACTGCCTTTATAAGAAT} \underline{\textbf{TAA}} \underline{\textbf{TTTGGAAGAGATTCACG}}$ ATTTCACCATGAGGACACTTATCTCTTTCAGTGGTCCTCCCAAGAAATTATTTAACAAACTGAAAGGAGATTTTG ATTAAAATTTTGCAGAGGTCTTCAGTATCTATATTTGAACACACTGTACAATAGTACAAAAACCAACATAGTTGG TAAACTTAAGGTGTTTAAAAAACTCTGCCTTCTATATTAATTGTAAAATTTTGCCTCTCAGAAGAATGGAATTGG AGATTGTAGACGTGGTTTTACAAAATGTGAAATGTCTAAATATCTGTTCATAAAAATAAAAGGAAAACATGTTTC TTCAAATTGCATAATGGAACAAATGGCAATGTGAGTAGGTTACATTTCTGTTGTTATAATGCGTAAAGATATTGA AAATATAATGAAATAAAAGCATCTTAGGTTATACCATCTTTATATGCTATTGCGTTTCAATATTTAAGATTTAAA GTGATTTTTTGGTCACAGTGTTTTGTTGATAAAATTTTTTTAGAATTGAAGTTTGAATTCTAAGACTTGAAACAA

PCT/US2003/028547

FIGURE 1087

MDALVEDDICILNHEKAHKRDTVTPVSIYSGDESVASHFALVTAYEDIKKRLKDSEKENSLLKKRIRFLEEKLIA RFEEETSSVGREQVNKAYHAYREVCIDRDNLKSKLDKMNKDNSESLKVLNEQLQSKEVELLQLRTEVETQQVMRN LNPPSSNWEVEKLSCDLKIHGLEQELELMRKECSDLKIELQKAKQTDPYQEDNLKSRDLQKLSISSDNMQHAYWE LKREMSNLHLVTQVQAELLRKLKTSTAIKKACAPVGCSEDLGRDSTKLHLMNFTATYTRHPPLLPNGKALCHTTS SPLPGDVKVLSEKAILQSWTDNERSIPNDGTCFQEHSSYGRNSLEDNSWVFPSPPKSSETAFGETKTKTLPLPNL PPLHYLDQHNQNCLYKN

PCT/US2003/028547

FIGURE 1088

CGCGCCCAATACGAACGCTACAGCTTCCGCAGCTTCCCACGGGACGAGCTGATGCCGCTCGAGTCGGCCTACCGG CACGCGCTGGACAAGTACAGCGGCGAGCACTGGGCCGAGAGCGTGGGCTACCTGGAGATCAGCCTGCGGCTGCAC GGCCTGCCAGCCTTCCGCCAGTCCCAGCCCAGCCGCGAGGTGCTGGCGGACTTCCAGCGCGCGAGCCCTACAAG TTCCTGCAGTTCGCTTACTTCAAGGCAAATAATCTCCCCAAAGCCATCGCCGCTGCTCACACCTTTCTACTGAAG GACCTGGAAACCAAGTCATATGAAAGCCTGTTCATCCGAGCAGTGCGGGCATACAACGGTGAGAACTGGAGAACA TCCATCACAGACATGGAGCTGGCCCTTCCCGACTTCTTCAAAGCCTTTTACGAGTGTCTCGCAGCCTGCGAGGGT TCCAGGGAGATCAAGGACTTCAAGGATTTCTACCTTTCCATAGCAGATCATTATGTAGAAGTTCTGGAATGCAAA ATACAGTGTGAAGAGAACCTCACCCCAGTTATAGGAGGCTATCCGGTTGAGAAATTTGTGGCTACCATGTATCAT TACTTGCAGTTTGCCTATTATAAGTTGAACGACCTGAAGAATGCAGCCCCCTGTGCAGTCAGCTATCTGCTCTTT GATCAGAATGACAAGGTCATGCAGCAGAACCTGGTGTATTACCAGTACCACAGGGACACTTGGGGCCTCTCGGAT GAGCACTTCCAGCCCAGACCTGAAGCAGTTCAGTTCTTTAATGTGACCACACTCCAGAAGGAGCTGTATGACTTT GCTAAGGAAAATATAATGGATGATGAGGGAGAAGTTGTGGAATATGTGGATGACCTCTTGGAACTGGAGGAG ACCAGCTAGCCCACAGCAACCAAAGAGACTTCCTCTTGGCGTTCAGGAAACACAGATTCTTTGTCCTTTTCCCAA CAGCCCAGGCTGTTGATACCTCAGAGCCTTCTCTTTACTCTCCAAAGTGAAAGGGAAGCCCCCGTCTCTCAACT GCATGTCATCAGGGGTGAGCCTGCCTTTCCTATCTTCACACCTGCCACCTCATGTTCACACCTATCTTTCTCACC TTTTTTTTGAGATGGAGTCTCGCTCTTGCCCAGGCTGGAGTGCAATGGCACGTTCTCAGCTCACTGCAACCTC CGCCTCTTGGGTTCAAGCAATTCTGCTGCATCAGCCTCCCGAGTACCTGGGATTACAGGCATGTGCCACCACGCC CGGCTAATTTTGTATTTTTAGTAGAGACGGGGTTTTGCCATGTTGGCCAGGCTGGTCTCGAACTCTTGACTTCAG ATGATCCATCTGCCTTGGCCTCCCACAGTGCTGGGATTACAGGCGTGAGCCACCATGCCCGGCCTCTTTCTCACC TTTACACCTGTCTTCTTATCCTCACATCTGTTTTCACACCTTCATCCCTGTCTTCCTCATGTTCACACTTGTCTT CCAGAAAATCAGTATTATTTTTTAAATAAGAAAAACATTCCTAGAAGATGATAATTGTGAAAAACCTCCTTTGGCT TATTTGCTTTTCCAGATTTTAGTCTCCTTTCTCCCCATCCGGGAAAGATGGTGGAAGACATAGGCTAAATTTCTC CAGCCTCACAATGGTCTTCACTTGGTCTGACTTGTACCAATTCTAGCACCCACTGAAAAACAAGTTGAGTAGAGA GTGTAGAGTGCAGAAATGTGGCTTTTGCCCCACTTTGCATCTCCAAAATTACAACGGTTGGCCGATCCCATTTGA **AGTAAATATTTATTGAGT**

PCT/US2003/028547

FIGURE 1089

GAATTCGGGCGCGAAGCGGCCGGCCTGGGCCCGACTGCAGAGCCGGGAGGCTGGTGGTCATCCCTG GTTCGCATCCTCCTTCTGCTGCTGCTTCTGCTGCTTCTGGGCCCTACGCGCGGCTTGCGCAATGCCACCCAGAGG CACTACTCCCGTGTGCCCCGCTTCTACTGGAAGGACCGGCTGCTGAAGATGAAGATGGCTGGGCTGAACGCCATC CAGACGTATGTGCCCTGGAACTTTCATGAGCCCTGGCCAGGACAGTACCAGTTTTCTGAGGACCATGATGTGGAA TATTTTCTTCGGCTGGCTCATGAGCTGGGACTGCTGGTTATCCTGAGGCCCGGGCCCTACATCTGTGCAGAGTGG GAAATGGGAGGATTACCTGCTTGGCTGCTAGAGAAAGAGTCTATTCTTCTCCGCTCCTCCGACCCAGATTACCTG GCAGCTGTGGACAAGTGGTTGGGAGTCCTTCTGCCCAAGATGAAGCCTCTCCTCTATCAGAATGGAGGGCCAGTT ATAACAGTGCAGGTTGAAAATGAATATGGCAGCTACTTTGCCTGTGATTTTGACTACCTGCGCTTCCTGCAGAAG CGCTTTCGCCACCATCTGGGGGATGATGTGGTTCTGTTTACCACTGATGGAGCACATAAAACATTCCTGAAATGT GGGGCCCTGCAGGGCCTCTACACCACGGTGGACTTTGGAACAGGCAGCAACATCACAGATGCTTTCCTAAGCCAG CACTCCACAATCAAGACCGAAGCAGTGGCTTCCTCCCTCTATGATATACTTGCCCGTGGGGCGAGTGTGAACTTG TACATGTTTATAGGTGGGACCAATTTTGCCTATTGGAATGGGGCCAACTCACCCTATGCAGCACAGCCCACCAGC TACGACTATGATGCCCCACTGAGTGAGGCTGGGGACCTCACTGAGAAGTATTTTGCTCTGCGAAACATCATCCAG AAGTTTGAAAAAGTACCAGAAGGTCCTATCCCTCCATCTACACCAAAGTTTGCATATGGAAAGGTCACTTTGGAA AAG1'TAAAGACAGTGGGAGCAGCTCTGGACATTCTGTGTCCCTCTGGGCCCATCAAAAGCCTTTATCCCTTGACA TTTATCCAGGTGAAACAGCATTATGGGTTTGTGCTGTACCGGACAACACTTCCTCAAGATTGCAGCAACCCAGCA CCTCTCTCTCACCCCTCAATGGAGTCCACGATCGAGCATATGTTGCTGTGGATGGGATCCCCCAGGGAGTCCTT GAGCGAAACAATGTGATCACTCTGAACATAACAGGGAAAGCTGGAGCCACTCTGGACCTTCTGGTAGAGAACATG GGACGTGTGAACTATGGTGCATATATCAACGATTTTAAGGGTTTGGTTTCTAACCTGACTCTCAGTTCCAATATC CTCACGGACTGGACGATCTTTCCACTGGACACTGAGGATGCAGTGCGCAGCCACCTGGGGGGGCTGGGGACACCGT GACAGTGGCCACCATGATGAAGCCTGGGCCCACAACTCATCCAACTACACGCTCCCGGCCTTTTATATGGGGAAC CACATCCTGATGACCTCGGCCCCAAACACCATCACCGTGCTGGAACTGGAGTGGGCACCCTGCAGCAGTGATGAT CCAGAACTATGTGCTGTGACGTTCGTGGACAGGCCAGTTATTGGCTCATCTGTGACCTACGATCATCCCTCCAAA AAGCCTGTGTCTTTGAGGGATTCTACCCTGAACATACCTCACAGATCCTCCCTGTCATGCCACATTTCACTGATT GGAATGTGGAAATGGAAAAGGAATTTAGGATGTGCATTTTCACCTGAGGTTTCCCTGCATCCCTGCAGTGCCAAA CCCGAATTC

PCT/US2003/028547

FIGURE 1090

MPGFLVRILLLLULLLLGPTRGLRNATQRMFEIDYSRDSFLKDGQPFRYISGSIHYSRVPRFYWKDRLLKMKMA
GLNAIQTYVPWNFHEPWPGQYQFSEDHDVEYFLRLAHELGLLVILRPGPYICAEWEMGGLPAWLLEKESILLRSS
DPDYLAAVDKWLGVLLPKMKPLLYQNGGPVITVQVENEYGSYFACDFDYLRFLQKRFRHHLGDDVVLFTTDGAHK
TFLKCGALQGLYTTVDFGTGSNITDAFLSQRKCEPKGPLINSEFYTGWLDHWGQPHSTIKTEAVASSLYDILARG
ASVNLYMFIGGTNFAYWNGANSPYAAQPTSYDYDAPLSEAGDLTEKYFALRNIIQKFEKVPEGPIPPSTPKFAYG
KVTLEKLKTVGAALDILCPSGPIKSLYPLTFIQVKQHYGFVLYRTTLPQDCSNPAPLSSPLNGVHDRAYVAVDGI
PQGVLERNNVITLNITGKAGATLDLLVENMGRVNYGAYINDFKGLVSNLTLSSNILTDWTIFPLDTEDAVRSHLG
GWGHRDSGHHDEAWAHNSSNYTLPAFYMGNFSIPSGIPDLPQDTFIQFPGWTKGQVWINGFNLGRYWPARGPQLT
LFVPQHILMTSAPNTITVLELEWAPCSSDDPELCAVTFVDRPVIGSSVTYDHPSKPVEKRLMPPPPQKNKDSWLD
HV

PCT/US2003/028547

FIGURE 1091

CTGAAAAAGACCTCAGAGGTGGACCTGGCCAAGCCGCTGGTGAAGTTCATCCAGCAGACTTACCCAAGCGGCGG GACAAGCACGAGGGCGCCCCGAGACGCTCCTGAGATATTATGATCAGATTTGTTCTATTGAACCCAAATTCCCA TTTTCTGAAAATCAGATCTGCTTGACATTTACCTGGAAGGATGCTTTCGATAAAGGTTCACTTTTTGGAGGCTCT ATTGCAGCAGAACAGAACCTGGATAATGATGAAGGATTGAAAATCGCTGCTAAACATTACCAGTTTGCTAGTGGT GCCTTTTTACATATTAAAGAGACGGTTTTATCTGCCTTAAGTCGAGAGCCGACCGTGGACATATCTCCAGATACT GTTGGGACCCTCAGTCTTATTATGCTGGCACAGGCTCAAGAAGTATTTTTTTAAAAGCCACAAGAGATAAAATG AAAGATGCCATCATAGCTAAATTGGCTAATCAGGCTGCAGATTATTTTGGTGATGCTTTCAAACAGTGTCAATAC AAAGATACTCTCCCCAAGGAGGTGTTCCCTGTCTTGGCTGCAAAGCACTGTATCATGCAGGCCAATGCTGAGTAC CATCAGTCTATCCTGGCAAAACAGCAGAAGAAATTTGGAGAAGAAATTGCAAGGTTACAGCATGCAGCAGAACTG GCTGCAGCAAAGAAGGATAATGACTTCATTTATCATGATCGAGTTCCAGACCTTAAAGATCTAGATCCTATTGGC GTTCCCGTGTCAGTACAGCAGTCTTTGGCTGCCTATAATCAGAGGAAAGCCGATTTGGTTAACAGATCAATTGCT CAGATGAGAAAGCCACCACTTTGGCAAATGGGGTGCTAGCTTCCCTTAATCTTCCAGCAGCAATTGAAGATGTG TCTGGAGACACTGTACCTCAGTCTATATTGACTAAATCCAGATCTGTGATTGAACAGGGAGGCATCCAGACTGTT GATCAGTTGATTAAAGAACTGCCTGAATTACTGCAACGAAATAGAGAAATCCTAGATGAGTCATTAAGGTTGTTG GATGAAGAAGCAACCGATAATGATTTAAGAGCAAAATTTAAGGAACGTTGGCAAAGGACACCATCCAATGAA GTGAAAGAATGTTACCAGTCTCATCGTGACACCATCGTGCTTTTGTGTAAGCCAGAGCCTGAGCTGAATGCTGCC ATCCCTTCTGCTAATCCAGCAAAGACCATGCAGGGCAGTGAGGTTGTAAAATGTCTTAAAATCCTTATTGTCAAAT TTTTTGACAGCCCTGGCTCAAGATGGTGTGATAAATGAAGAAGCTCTTTCTGTTACTGAACTAGATCGAGTCTAT GGAGGTCTTACAACTAAAGTCCAAGAATCTCTAAAGAAACAGGAGGGACTTCTTAAAAATATTCAGGTCTCACAT CAGGAATTTTCAAAAATGAAACAATCTAATAATGAAGCTAACTTAAGAGAAGAAGTTTTGAAGAATTTAGCTACT CTGGTCAGGTTCCAGAACAAATGCAGTGATATAGTTTTTGCACGGAAGACAGAAAGAGATGAACTCTTAAAGGAC TTGCAACAAAGCATTGCCAGAGAACCTAGTGCTCCTTCAATTCCTACACCTGCGTATCAGTCCTCACCAGCAGGA CCACCACCTGTGCTTCCAGCAAATCGAGCTCCTTCTGCTACTGCTCCATCTCCAGTGGGGGCTGGGACTGCTGCG CCAGCTCCATCACAAACGCCTGGCTCAGCTCCTCCACAGGCGCAGGGACCACCCTATCCCACCTATCCAGGA TATCCTGGGTATTGCCAAATGCCCATGCCCATGGGCTATAATCCTTATGCGTATGGCCAGTATAATATGCCATAT CCACCAGTGTATCAGCAGAGTCCTGGACAGGCTCCATACCCGGGACCCCAGCAGCCTTCATACCCCTTCAG $\tt CCCCACAGCAGTCTTACTATCCACAGCAG\underline{TAA} \tt TATGTCTGCTCAGCAGCTCAGCTGATTCAGATCAGAGGGAAA$ GAAATACCAACCCTGCAATAAGTGTACTAAACTCTACGCTCTGGTTAATGTAATGTACTCTCCTGGACTGAATGC AGTGTATAATTTCTGTCTACAGCTAGAAGCTGTGCCCCAGTTCCACATTTGATTACACATGTGAGATTTGCTGCT GTTGCAGTATAAACACTAGGTATAATAGGATTTGAAATTGCATTACAGTTCATAAAAATTGAAAATGAGAAATTA

PCT/US2003/028547

FIGURE 1092

MATFISVQLKKTSEVDLAKPLVKFIQQTYPSGGEEQAQYCRAAEELSKLRRAAVGRPLDKHEGALETLLRYYDQI
CSIEPKFPFSENQICLTFTWKDAFDKGSLFGGSVKLALASLGYEKSCVLFNCAALASQIAAEQNLDNDEGLKIAA
KHYQFASGAFLHIKETVLSALSREPTVDISPDTVGTLSLIMLAQAQEVFFLKATRDKMKDAIIAKLANQAADYFG
DAFKQCQYKDTLPKEVFPVLAAKHCIMQANAEYHQSILAKQQKKFGEEIARLQHAAELIKTVASRYDEYVNVKDF
SDKINRALAAAKKDNDFIYHDRVPDLKDLDPIGKATLVKSTPVNVPISQKFTDLFEKMVPVSVQQSLAAYNQRKA
DLVNRSIAQMREATTLANGVLASLNLPAAIEDVSGDTVPQSILTKSRSVIEQGGIQTVDQLIKELPELLQRNREI
LDESLRLLDEEEATDNDLRAKFKERWQRTPSNELYKPLRAEGTNFRTVLDKAVQADGQVKECYQSHRDTIVLLCK
PEPELNAAIPSANPAKTMQGSEVVNVLKSLLSNLDEVKKEREGLENDLKSVNFDMTSKFLTALAQDGVINEEALS
VTELDRVYGGLTTKVQESLKKQEGLLKNIQVSHQEFSKMKQSNNEANLREEVLKNLATAYDNFVELVANLKEGTK
FYNELTEILVRFQNKCSDIVFARKTERDELLKDLQQSIAREPSAPSIPTPAYQSSPAGGHAPTPPTPAPRTMPPT
KPQPPARPPPPVLPANRAPSATAPSPVGAGTAAPAPSQTPGSAPPPQAQGPPYPTYPGYPGYCQMPMPMGYNPYA
YGQYNMPYPPVYHQSPGQAPYPGPQQPSYPFPQPPQQSYYPQQ

PCT/US2003/028547

FIGURE 1093A

TGCGGAGGCCGAGGACAGGACGTGGGCTGGGCCGGCAGTGCCGGACTCGGAGGAGCAGGAGGCGAGGTCCGCCG ACGATTGGTGGGGGCGCGGCGGCGGCGGCGGCGGCGGGGGAGACGAGCGAGAGACGAGCGAG ${\tt ATCAACAGGGACGATTACGAGCTGCAGGAGGTGATCGGGAGTGGAGCAACTGCTGTAGTCCAAGCAGCTTATTGT}$ GCCCCTAAAAAGGAGAAAGTGGCAATCAAACGGATAAACCTTGAGAAATGTCAAACTAGCATGGATGAACTCCTG AAAGAAATTCAAGCCATGAGTCAATGCCATCCTAATATTGTATCTTACTACACATCTTTTGTGGTAAAAGAT GAGCTGTGGCTTGTCATGAAGCTGCTAAGTGGAGGTTCTGTTCTGGATATTATTAAGCACATTGTGGCAAAAGGG ${\tt GAACACAAAAGTGGAGTCCTAGATGAATCTACCATTGCTACGATACTCCGAGAAGTACTGGAAGGGCTGGAATAT}$ CTGCATAAAAATGGACAGATCCACAGAGATGTGAAAGCTGGAAACATTCTTCTTGGAGAAGATGGCTCAGTACAG ATTGCAGACTTTGGGGTTAGTGCTTTTTTAGCAACTGGTGGTGATATTACCCGAAATAAAGTGAGAAAGACCTTT GTTGGCACCCCTTGTTGGATGGCACCTGAAGTTATGGAACAGGTCCGTGGTTATGATTTCAAAGCTGATATTTGG AGTTTTGGAATTACAGCAATTGAATTGGCTACAGGGGGGGCTCCTTATCATAAATATCCACCAATGAAGGTTTTA ATGCTGACACTGCAGAACGATCCTCCTTCTTTGGAAACTGGTGTTCAAGATAAAGAAATGCTGAAAAAATATGGA AAATCATTTAGAAAAATGATTTCATTGTGCCTTCAAAAAGATCCAGAAAAAAGACCAACAGCAGCAGAACTATTA TCTGAAAGAGCAAAAAAGGTTCGGAGAGTACCAGGTTCCAGTGGGCGTCTTCATAAGACAGAGGATGGAGGCTGG GAGTGGAGTGATGATGAATTTGATGAAGAAAGTGAGGAAGGGAAAGCAGCAATTTCACAACTCAGGTCTCCCCGA GTGAAAGAATCAATATCAAATTCTGAGCTCTTTCCAACAACTGATCCTGTGGGTACTTTGCTCCAAGTTCCAGAA GCAGAGCCAGCAAAAACAGCTCAGGCTTTGTCTTCAGGATCAGGTTCACAAGAAACCAAGATCCCAATCAGTCTA GTACTAAGATTAAGGAATTCCAAAAAAGAACTAAATGATATTCGATTTGAATTTACTCCTGGGAGAGATACAGCA GAGGGTGTCTCTCAGGAACTCATTTCTGCTGGCCTGGTCGACGGAAGGGATTTAGTAATAGTGGCAGCTAATTTG CAGAAAATTGTGGAAGAACCTCAGTCAAATCGATCTGTCACTTTCAAACTGGCATCTGGTGTCGAAGGCTCAGAT TAAGGAGATTCCACACATGCGTATCTCTGTTGCTTCTATTGGCCTAAACCCACTACTGCCAAAGAACCCAGCAAC AAACCTCCCGGCTAGGAGCTTTAGAAGTCTTTATGTTCTTCCTGCCATCATTCCTCCTTTTCCCACAGGGAAAGA TTTTTCTTTGTACCTGATGTGAATTCTAGCAACCTTTGTTAGGAAAAAGCACAGCCTCAGATGGAGGCAGCCTAA ACTGTGTTCTTGTTCATGGTGTTTCTAAGCGTTTTGCTGAAGCTGCTCTCAGGCACCCCCTTCTTCATTG CTCTCTCCAGAAAGGGTTGCTAGCCTTAACTTCAGCTGGTGCAAAACATCTGACTGTAGCCGAACTTCAGCCATC AGATCCTTCAAAGTGGAACTTTGGATTGTTTTTACAGACAACATCGAGTAATGGCTTGTAAATGTGAATTTTGCC AAAAACTCAATCCTCCCATGAAAATCAGTTCGCCTGGCCTCCAAGTCGTGAGGAAATGGGTATGCAAGGCTGAGA TGGAGGGGGTCTCTGTGTGCTGAAGCTAACTCAAGATGGAAAGTGAAACCACATGTGCCGTGACCTTTAGGTTTT ATGAGTAGACAGTGTTCATTTGATTTTCTACAGAAATAATATAAATTATTCTTTAGGTTTAAAAAAAGAGCACTCA AGTAACCCTACCGAGTTTTATATATGAGTGGGATACTCAATCTGGCCTTAAAAAGATACACAAAGATGGGCTGTG GGTCCCTGGAAAGGGGGAGAGTTGCCCTTTACAGAATCACTCGAGCCCTTTCCAGCACTGTTGGTCTGATGAACA AGGTTGTTTTACCTTATTTTCTCTTGGAACATATCTGAAAACCTTCCCCACAAATAACTTGTCACACCTTTTGTT TCATTCTGAGTCTTTAGTTTTAGTCATGGGCTTTCTTCACCTGCTCTAGGTGCAAAGGCATGTTGGGAAAGAGAT GGATGTTGGGGAGGAAGAGAGAGATGGATTTCAGTTGGGAGTTAGGAGGAGAGTAGGTGAGATGATCAGACACC

PCT/US2003/028547

FIGURE 1093B

PCT/US2003/028547

FIGURE 1094

MSEDSSALPWSINRDDYELQEVIGSGATAVVQAAYCAPKKEKVAIKRINLEKCQTSMDELLKEIQAMSQCHHPNI
VSYYTSFVVKDELWLVMKLLSGGSVLDIIKHIVAKGEHKSGVLDESTIATILREVLEGLEYLHKNGQIHRDVKAG
NILLGEDGSVQIADFGVSAFLATGGDITRNKVRKTFVGTPCWMAPEVMEQVRGYDFKADIWSFGITAIELATGAA
PYHKYPPMKVLMLTLQNDPPSLETGVQDKEMLKKYGKSFRKMISLCLQKDPEKRPTAAELLRHKFFQKAKNKEFL
QEKTLQRAPTISERAKKVRRVPGSSGRLHKTEDGGWEWSDDEFDEESEEGKAAISQLRSPRVKESISNSELFPTT
DPVGTLLQVPEQISAHLPQPAGQIATQPTQVSLPPTAEPAKTAQALSSGSGSQETKIPISLVLRLRNSKKELNDI
RFEFTPGRDTAEGVSQELISAGLVDGRDLVIVAANLQKIVEEPQSNRSVTFKLASGVEGSDIPDDGKLIGFAQLS
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WO 2004/030615 PCT/US2003/028547

FIGURE 1095

CCGGTCTCCTCCACATCCTCCCTTCCCCTGGCTGCTCTCAACATGCGAGTGCGGCGCCGCCTGTCTCTTGTTCTTG AACGTGCGGACACAGGTGGCGGCCGACTGGACCGCGCTGGCGGAGGAGATGGACTTTGAGTACTTGGAGATCCGG CAACTGGAGACACAAGCGGACCCCACTGGCAGGCTGCTGGACGCCTGGCAGGGACGCCCTGGCGCCTCTGTAGGC ${\tt CGACTGCTCGAGCTGCTTACCAAGCTGGGCCGGACGACGTGCTGCTGGAGCTGGGACCCAGCATTGAGGAGGAT}$ TGCCAAAAGTATATCTTGAAGCAGCAGCAGGAGGAGGCTGAGAAGCCTTTACAGGTGGCCGCTGTAGACAGCAGT GTCCCACGGACAGCAGAGCTGGCGGGCATCACCACACTTGATGACCCCCTGGGGCATATGCCTGAGCGTTTCGAT GCCTTCATCTGCTATTGCCCCAGCGACATCCAGTTTGTGCAGGAGATGATCCGGCAACTGGAACAGACAAACTAT GAAAAGAGGTGCCGCCGGATGGTGGTGGTTGTCTCTGATGATTACCTGCAGAGCAAGGAATGTGACTTCCAGACC AAATTTGCACTCAGCCTCTCCCAGGTGCCCATCAGAAGCGACTGATCCCCATCAAGTACAAGGCAATGAAGAAA GAGTTCCCCAGCATCCTGAGGTTCATCACTGTCTGCGACTACACCCAACCCCTGCACCAAATCTTGGTTCTGGACT CGCCTTGCCAAGGCCTTGTCCCTGCCC<u>TGA</u>AGACTGTTCTGAGGCCCTGGGTGTGTGTATCTGTCTGCCTGTC CATGTACTTCTGCCCTGCCTCCTTTCGTTGTAGGAGGAATCTGTGCTCTACTTACCTCCAATTCCTGGAGA TGCCAACTTCACAGACACGTCTGCAGCAGCTGGACATCACATTTCATGTCCTGCATGGAACCAGTGGCTGTGAGT GGCATGTCCACTTGCTGGATTATCAGCCAGGACACTATAGAACAGGACCAGCTGAGACTAAGAAGGACCAGCAGA GCCAGCTCAGCTCTGAGCCATTCACACATCTTCACCCTCAGTTTCCTCACTTGAGGAGTGGGATGGGGAGAACAG AGAGTAGCTGTTTGAATCCCTGTAGGAAATGGTGAAGCATAGCTCTGGGTCTCCTGGGGGAGACCAGGCTTGG CTGCGGGAGAGCTGGTTGCTGGACTACATGCTGGCCACTGCTGTGACCACGACACTGCTGGGGCAGCTTCTT CCACAGTGATGCCTACTGATGCTTCAGTGCCTCTGCACACCGCCCATTCCACTTCCTCCTTCCCACAGGGCAGG TGGGGAAGCAGTTTGGCCCAGCCCAAGGAGACCCCATCTTGAGCCTTATTTCCTAATGGGTCCACCTCTCATCTG CATCTTTCACACCTCCCAGCTTCTGCCCAACCTTCAGCAGTGACAAGTCCCCAAGAGACTCGCCTGAGCAGCTTG GGCTGCTTTTCATTTCCACCTGTCAGGATGCCTGTGGTCATGCTCTCAGCTCCACCTGGCATGAGAAGGGATCCT GGCCTCTGGCATATTCATCAAGTATGAGTTCTGGGGATGAGTCACTGTAATGATGTGAGCAGGGAGCCTTCCTCC CTGGGCCACCTGCAGAGAGCTTTCCCACCAACTTTGTACCTTGATTGCCTTACAAAGTTATTTGTTTACAAACAG TATATGTACAGACATGTACTCTCACACACACAGGCACCAGCATACACACGTTTTTCTAGGTACAGCTCCCAGGAA CAGCTAGGTGGGAAAGTCCCATCACTGAGGGAGCCTAACCATGTCCCTGAACAAAAATTGGGCACTCATCTATTC CTTTTCTCTTGTGTCCCTACTCATTGAAACCAAACTCTGGAAAGGACCCAATGTACCAGTATTTATACCTCTAAT GAAGCACAGAGAGAGAGAGAGAGCTGCTTAAACTCACACAACAATGAACTGCAGACACAGCTGTTCTCCCCTCT CTCCTTCCCAGAGCAATTTATACTTTACCCTCAGGCTGTCCTCTGGGGAGAAGGTGCCATGGTCTTAGGTGTCTG TGCCCCAGGACAGACCCTAGGACCCTAAATCCAATAGAAAATGCATATCTTTGCTCCACTTTCAGCCAGGCTGGA GCAAGGTACCTTTCTTAGGATCTTGGGAGGGAATGGATGCCCCTCTCTGCATGATCTTGTTGAGGCATTTAGCT GCCATGCACCTGTCCCCCTTTAATACTGGGCATTTTAAAGCCATCTCAAGAGGCATCTTCTACATGTTTTGTACG CATTAAAATAATTTCAAAGATATCTGAGAAAAGCCGATATTTGCCATTCTTCCTATATCCTGGAATATATCTTGC

PCT/US2003/028547

FIGURE 1096

MAAGGPGAGSAAPVSSTSSLPLAALNMRVRRRLSLFLNVRTQVAADWTALAEEMDFEYLEIRQLETQADPTGRLL DAWQGRPGASVGRLLELLTKLGRDDVLLELGPSIEEDCQKYILKQQQEEAEKPLQVAAVDSSVPRTAELAGITTL DDPLGHMPERFDAFICYCPSDIQFVQEMIRQLEQTNYRLKLCVSDRDVLPGTCVWSIASELIEKRCRRMVVVVSD DYLQSKECDFQTKFALSLSPGAHQKRLIPIKYKAMKKEFPSILRFITVCDYTNPCTKSWFWTRLAKALSLP

PCT/US2003/028547

FIGURE 1097

ATGTGGTTCTGCGCGTGTGCGGACGGCTGTCTGTTAACTCCGCGGTCAGTTCCCGGACTGGTGGTCTGCAG GGTTGACCTGCGCAATGCAGAGGCTGCAGGTAGTGCTGGGCCACCTGAGGGGTCCGGCCGATTCCGGCTGGATGC CGCAGGCCGCGCCTTGCCTGAGCGGTGCCCCGCAGGCCTCGGCCGCGGACGTGGTGGTGCTGCACGGGCGCGCA CGGCCATCTGCCGGGCGGGCGGCGGCGGCTTCAAGGACACCACCCCGACGAGCTTCTCTCGGCAGTCATGACCG CGGTTCTCAAGGACGTGAATCTGAGGCCGGAACAGCTGGGGGACATCTGTGTCGGAAATGTGCTGCAGCCTGGGG CCGGGGCAATCATGGCCCGAATCGCCCAGTTTCTGAGTGACATCCCGGAGACTGTGCCTTTGTCCACTGTCAATA GACAGTGTTCGTCGGGGCTACAGGCAGTGGCCAGCATAGCAGGTGGCATCAGAAATGGGTCTTATGACATTGGCA TGGCCTGTGGGGTGGAGTCCATGTCCCTGGCTGACAGAGGGAACCCTGGAAATATTACTTCGCGCTTGATGGAGA AGGAGAAGGCCAGAGATTGCCTGATTCCTATGGGGATAACCTCTGAGAATGTGGCTGAGCGGTTTGGCATTTCAC GGGAGAAGCAGGATACCTTTGCCCTGGCTTCCCAGCAGAAGGCCAGAAGAGCCCAGAGCAAGGGCTGTTTCCAAG CTGAGATTGTGCCTGTGACCACCGGTCCATGATGACAAGGGCACCAAGAGGGAGCATCACTGTGACCCAGGATG CAGCTGGAAACTCTAGCCAGGTGAGTGATGGGGCAGCTGCCATCCTGCTGGCCCGGAGGTCCAAGGCAGAAGAGT TGGGCCTTCCCATCCTTGGGGTCCTGAGGTCTTATGCAGTGGTTGGGGTCCCACCTGACATCATGGGCATTGGAC AGGCCTTTGCAAGCCAGGCTGCCTACTGTGTGGAGAAGCTACGACTCCCCCTGAGAAGGTGAACCCCCTGGGGG GTGCAGTGGCCTTAGGGCACCCACTGGGCTGCACTGGGGCACGACAGGTCATCACGCTGCTCAATGAGCTGAAGC GCCGTGGGAAGAGGGCATACGGAGTGGTGTCCATGTGCATCGGGACTGGAATGGGAGCCGCTGCCGTCTTTGAAT ${\tt ACCCTGGGAAC} \underline{{\tt TGA}} {\tt GTGAGGTCCCAGGCTGGAGGCGCTACGCAGACAGTCCTGCTGCTCTAGCAGCAAGGCAGTA}$ ACACCACAAAAGCAAAACCACATGGGAAAACTCAGCACTGGTGGTGGTGGCAGTGGACAGATCAAGGCACTTCAA TTAGCTGTGCAAGATAAAAGCAGCCTGGGTCACCCAGGCCACAAGGCCATGGTTAATTCTTAAGGCAAGGCAAAT CCATGGATGAGAAGTGCAATGGGCATAGTAAAAGTGCATGAATTT

PCT/US2003/028547

1178/6881 FIGURE 1098

MQRLQVVLGHLRGPADSGWMPQAAPCLSGAPQASAADVVVVHGRRTAICRAGRGGFKDTTPDELLSAVMTAVLKD VNLRPEQLGDICVGNVLQPGAGAIMARIAQFLSDIPETVPLSTVNRQCSSGLQAVASIAGGIRNGSYDIGMACGV ESMSLADRGNPGNITSRLMEKEKARDCLIPMGITSENVAERFGISREKQDTFALASQQKAARAQSKGCFQAEIVP VTTTVHDDKGTKRSITVTQDEGIRPSTTMEGLAKLKPAFKKDGSTTAGNSSQVSDGAAAILLARRSKAEELGLPI LGVLRSYAVVGVPPDIMGIGPAYAIPVALQKAGLTVSDVDIFEINEAFÄSQAAYCVEKLRLPPEKVNPLGGAVAL GHPLGCTGARQVITLLNELKRRGKRAYGVVSMCIGTGMGAAAVFEYPGN

PCT/US2003/028547

FIGURE 1099

GTTCCTCCGGGAGCCCAACACCGTTCCCGCGCGGCCACGATCATCCCTCCGAGCAGCCCCCGCGAGGACGGCGTG GACGGGCTGCCCAAGGAGGCGGTGGGCCCGAGCAACCGCCCTCTCCTGCATCCACCAGCAGCCAGGAATCCAAG CTCCAGAAACTAAAACGATCACTTTCTTCAAGACCAAGAGTTTACGGAGCAAAAGTGCTGACAACTTCTTCCAG CGAACCAACAGCGAAGACATGAAACTGCAAGCACATGGTGGCTGAGATCAGCCCCAGCTCCAGCCCACTCCCT GCTCCAGGAAGCCTGACGTCCACACCCGCCAGGGCTGGTCTGCATCCAGGTGGCAAGGCTCATGCCTTTCAGGAA TACATCTTCAAGAAGCCCACTTTCTGTGATGTCTGCAACCACATGATAGTGGGAACAAATGCTAAGCATGGACTG CGCTGCAAAGCCTGTAAGATGAGCATCCACCACAAGTGCACAGATGGCCTGGCACCCCAGCGGTGCATGGGCAAG ATGCCCATTGCCTGTGGCAATAAGGTGGACCCTGTCTACGAGACCCTCCGCTTCGGCACCTCCCTGGCCCAGAGG ACAAAGAAGGGCAGCTCCGGCAGTGGCTCTGACTCACCTCACAGAACCTCTACTTCAGATCTTGTGGAGGTTCCT GAGGAAGCCAATGGGCCAGGAGGCGGGTATGACCTAAGGAAACGCAGCAACAGCGTGTTTACATATCCAGAAAAT. GGCACTGATGATTTCAGAGATCCAGCGAAGAACATAAACCACCAGGGATCTCTTTCCAAAGACCCATTACAGATG AACACCTATGTTGCCTTGTACAAATTTGTACCACAGGAGAATGAAGATTTGGAAATGAGGCCAGGAGACATAATT ACTCTTTTAGAGGATTCCAATGAAGACTGGTGGAAAGGGAAAATTCAAGACAGAATTGGCTTCTTTCCAGCCAAC TTTGTTCAGAGACTACAACAAAATGAGAAGATTTTTAGATGTGTTAGAACCTTCATTGGGTGTAAGGAACAGGGG CAGATAACACTGAAAGAGAATCAGATCTGCGTGAGTTCTGAAGAAGAACAAGATGGTTTTATCAGAGTCCTCAGT GGAAAAAAGAAAGGCCTCATCCCCCTTGATGTACTAGAAAACATC<u>TGA</u>TTGCTGGCTCCTCCTCCGTTTGCAGTA GGCAAGCTCTGCTGCGATGCCTCTGCCTCATCTCACACTGCGTCAACCCAAAGGAGCTGCCGCACTGACCCAGCC CCCCAGGAAACAGTGAGACAAGAATCAAGTATCTGAGACTGTGGAGTAATAGCCACAAAACAGAGGGCCCACTGC ACACTGGAGTGTGCTCCAGTTTGCAGGGTAGCCCAGTGCAAGGTTCAGATCCATGTAGCTAAGTATTATCCTGCT TCCAGACCTATGTCACCAGTACCAATCAGTCAGTGTCATCACATTTCAGGCCCCAAGCAATCTCTGTGCAAAGCA TCAGAAAGACCTGCTTCCCAGCCCCCAGCATTCCAGTGCTCTCCAGGCTTCCTCTTTTTGTGATTGTGCTGTCCA GAGTGTCCAGCTTGTTCTTTCTTTCTCTCAGTCCTCTGAGTACATCTGGTGGTGCATTAGATGTGAGGGCTA GTACTGGCCTGGGTGACAGAGCAGGACATGAGACATAGATACAGTGGGGAGGAGAAGTGGGGAAAGGTGGAGCAG AGAGTTCTTACTTATTGAAGATTATACAGCCCTTTCGGTTATGAAGTCCCTGCTTGAAGGCAATGGACCTGGGGA AGAGACTATCACAAAAAGTCTCCATTTTCATTTTACATCCTCTCTATTGGAGGCAGCACTTTTCCCTCATGCTGT CCTATAGGACTCCACTTTGAAGGTTGTGCCTACGTTGCAGGGAACTAGGAACATGGAGGGGAACCAACAACAGCA TCTTAGAAGAAATGTAGCCAAATTGGAGTCCATTCTTCTTTAGGGCAGTATATGAAATCCTAGCAGATGTAAAAT GGAAAAGAATCCTAATGCTTCTTCCTTCAGAAAGTAGAGGAACTAGGGGCCCAATTAGCATCATCTAGGGGAATC TCTATTACTCTGTACTTATACTAATGTTTACAAGAATGCAATATACTGTGATGCCTTCCTACTCAAGCCTCCTAG CATTCAAACTTCCATCCTATTAGTCATTAACGTGGTTAAACTTCAATTCACAATCACCTTGGAATCAATGTCAGT TTGATTTATTTTGTTACAGAGCAATAAAATCATTAGAACAATGGTTTTTAAAAGACTTAAGTGGATGCATCCTAT TTGGGAACTGAGAGGGGATGGCTGCTTGCTTACAGAAGTTTGGATGCCTTACTCTTATCTTAAAGCCAGCATCC AGAATTTCCTCCCTCTGATGCCACATGCAAAACCAGGTGTACGATGTCAAGATGGATTCTTTGAGAGCCAGGG TAGATCATATGACTGCCTTTCTGTAAAATTGGATGCCTAGTACAAATGCTCTTTGCCTCTAATTCAGTATTCCAT TTAATAAAACAATACAGTGGCTGGAAAGGAGCATCAG

PCT/US2003/028547

FIGURE 1100

MIPPSSPREDGVDGLPKEAVGAEQPPSPASTSSQESKLQKLKRSLSFKTKSLRSKSADNFFQRTNSEDMKLQAHM VAEISPSSSPLPAPGSLTSTPARAGLHPGGKAHAFQEYIFKKPTFCDVCNHMIVGTNAKHGLRCKACKMSIHHKC TDGLAPQRCMGKLPKGFRRYYSSPLLIHEQFGCIKEVMPIACGNKVDPVYETLRFGTSLAQRTKKGSSGSGSDSP HRTSTSDLVEVPEEANGPGGGYDLRKRSNSVFTYPENGTDDFRDPAKNINHQGSLSKDPLQMNTYVALYKFVPQE NEDLEMRPGDIITLLEDSNEDWKGKIQDRIGFFPANFVQRLQQNEKIFRCVRTFIGCKEQGQITLKENQICVSS EEEQDGFIRVLSGKKKGLIPLDVLENI

PCT/US2003/028547

FIGURE 1101

GCCGCGGCTTCGTTTGTGAGGAAGGGGGCCTAGGCCCGGGCCTGCGGTGGTGGGGGGTTGCTGCGCGCGGGGGT CGCTCCTGCTGTGTCTTCCGCTCCAGCTTCGCCCACTTCCCCTTGCCAGCGGGGTGGGCGCGGAGAAGACCTGCC GGAGCCATCGAGGACGAAGTGGTCCGCTTTGCCAAGAAGATGGACAAGATGGTGCAGAAGAAGAACGCGGCTGGA GCATTGGATTTGCTAAAGGAGCTTAAGAATATTCCTATGACCCTGGAATTACTGCAGTCCACAAGAATCGGAATG TCAGTTAATGCTATTCGCAAGCAGAGTACAGATGAGGAAGTTACATCTTTGGCAAAGTCTCTCATCAAATCCTGG AAAAAATTATTAGATGGGCCATCAACTGAGAAAGACCTTGACGAAAAGAAGAAGAACCTGCAATTACATCGCAG AACAGCCCTGAGGCAAGAAGAAAGTACTTCCAGCGGCAATGTAAGCAACAGAAAGGATGAGACAAATGCTCGA GATACTTATGTTTCATCCTTTCCTCGGGCACCAAGCACTTCTGATTCTGTGCAGTTGAAGTGTAGGGAGATGCTT GCTGCAGCTCTTCGAACAGGGGATGACTACATTGCAATTGGAGCTGATGAGGAAGAATTAGGATCTCAAATTGAA GAAGCTATATATCAAGAAATAAGGAATACAGACATGAAATACAAAAATAGAGTACGAAGTAGGATATCAAATCTT AAAGATGCAAAAAATCCAAATTTAAGGAAAAATGTCCTCTGTGGGAATATTCCTCCTGACTTATTTGCTAGAATG ACAGCAGAGGAAATGGCTAGTGATGAGCTGAAAGAGATGTGGAAAAACTTGACCAAAGAAGCCATCAGAGAGCAT CAGATGGCCAAGACTGGTGGGACCCAGACTGACTTGTTCACATGTGGCAAATGTAAAAAGAAGAATTGCACTTAC AAGTTCTGT<u>TGA</u>GTTGGAAGAATTGGCAAAATATCTGGACCATTAAGAAAACGGATTTTGTAACTAGCTTTAAAC TAGGCCAAGCAACTAGTTTTCCTGCAAATCAAATTTTTAAAGCAACTTGAGTTAGACTTTGTTTTTTGACCTAACA TCCCTTCCTTAAATGCCTTCTGTAGTTTCAGATCAGTAGGGAGACCATATAATAATTGTATGGTACCTGTTTCAA AAATACACCTTAACTTTTTTTTTTTTACACTGTGAAACATACACAGTAGAAATTCTGTTACTCTGTTATTAAT ACATAAATGAAAATACTTTTTTTCCATATTGGCATGTAGCTACAAATATTAAAGGAGGAGAAAAGGTAATATAA TTTTAGGTTTACCAAATATGGTGTGTATTCAAATAATACTTGACCAGCTTATCTAAAATGTACATAATTTTGAGG TAGCTTATGAATTTGATTTTAATTATTGTTCACAAGCTTGGAATATTAGATATTATTTTTGCATCTGTAACTAA CCGTGATCATCATCTCTTGTAATTTCTTGTACATGTATATTACTTGTTCTTAATAGATTTTTGGAAACAAGACTT TATTGAGATCAGTTTGGTTTTCCTGTTAATTTACCTGTTTGACTTTATAATGTGTTTTAGTTTTGCAGAAGAACA CTGTTGTAGTTTAGAAGGCTTTTCATAAATCCCCTCATAGGCAAAGATGAGAACTTCCCACTATTTTTTCCCCT CTTAGGAAGACATACTGGAAAGAAATGTTTAGCATCTTAGTGTAGTATAGCTATTGTAAACAGTTCATGACTAG ATTTTGATTCGGAAATCTATACTGACCAAGGATTAATCTTAAGGACTGTATAATTCATTAAAGCGGTGGTCTTTC TGAACAAACTGAATATATGGGCTATAGCAAGTAGCTTTACAGTACAGATCTTACAATTAAGTTTTGCTTTTGTTA AAGTGTGTACCATTTTTTCTGTTTGGAGTAAGACAAAAATTGTTTTGACATAGGTTCCCTAGGGTACACTTGCTC TAGCATACTTTAAAGGCCACTGTTGCAAAGTCTACATTTTATGCTGAATCTGCATTCTGTCAGGCACCCGTAGAA AGACCTCAGTACATGCTTTGCACTCTCTTTGCTCCCTTTTTCCAATTTCTTATTGCATATCATTTTGTTGTAAT ACAGAAAGCAGCATTTTTAAATGTCCATGTTAAGAATTGGCCCACTGGTACCGACTCACCTCTATTTTGTCAGTT CATAGTTGAAGATTTTGTTTTATTTCAAAAACAAAGTACATTTTTGAAATAATGTTTCAGAATAAAATAATCTCA

PCT/US2003/028547

1182/6881 FIGURE 1102

MEDEVVRFAKKMDKMVQKKNAAGALDLLKELKNIPMTLELLQSTRIGMSVNAIRKQSTDEEVTSLAKSLIKSWKK LLDGPSTEKDLDEKKKEPAITSQNSPEAREESTSSGNVSNRKDETNARDTYVSSFPRAPSTSDSVQLKCREMLAA ALRTGDDYIAIGADEEELGSQIEEAIYQEIRNTDMKYKNRVRSRISNLKDAKNPNLRKNVLCGNIPPDLFARMTA EEMASDELKEMWKNLTKEAIREHQMAKTGGTQTDLFTCGKCKKKNCTYTQVQTRSADEPVTTFVVCNECGNRWKF C

PCT/US2003/028547

FIGURE 1103

 ${\tt AGGTCCCACCGCTCCTACCAGCAGCCTGACCCAGG} \underline{{\tt ATG}} {\tt GCTCTACTCCCCAGCCTTCAATCCCTGGACCTGGGTT}$ TGGAATTAGGAGACTTCCGTCGAGGGTCAATTGTGCGGGATCCTGGCCATTCCATACAAAATCTCACGACTGGCA AAAGAGAGGGGACCCCTCGAGCAGAGGTCAGATATCACAAGGGACCCGGGTTTTTCCACCCCGCCCTCATTCCC AGCGTGGGGTCTCAGATGAGTGGGAAAACCTCAAATATGGATCAGAAATCATGCAAGTTCGGACTCTGGCCTTAG ${\tt GAGAAAACTCT} \underline{{\tt TAA}} {\tt CGGAGATGGAATGTCACGAGGGATCCAGCCACCCCATCCACTCATTGACTGGATGAAGTT}$ TTGCGATGGGAAAATCCAGGTCAGGAGTTACGGACGACCTGCACCGCCCGGAGCTCCTTCTGGGTCCGGAGTTTG GGAAAAGTGCGGGTTAGGGGTTAAAGGTCACGGAAGAACTTCCCCACTCCCCCGCCTCTTTCGTCCGCGGGCCG GTTCAAGAGGTATTCGGAACCAGGGGAGGAGGAGCGGCGCCGCCATCGTACCTGAGCAGGAGCCAGCGCCTGCTGGAG GGGGCCGGGCCTCGCCGTCTCCTTGAGGCTGTGGGCAAGTCCGGACACTCGTCCTGAGGGTGTCGGCGTCG CCGCCGCGCGTCTCTTTCTTCCGGGTGCCACTGGCTGGCCTCGGCCCCCATCCAGCCCCGGGAGCCGCGGGGG CGACGACAACGGCAGCAGGTGAACTGTGCGCCAAGGGCGCTTGCGCGGCCTACGTGGAGCTCACAGAGGCTAACT ACGGAGCACCGGATGGGACAAGCACAATGTCGGGTCCCGCACATGCGCGCTCGGCCGGTCGCTTCCGAACTCGCT GCGTGGGCTAGTCTGAACACTACCCTGACTCTCACCTGGGCTTTGGCCCTGCGAAATCAGACGGGGAGAGTGCTG CTTCTATCGATGGCAGGGCCGACGGGCCCACCGCAAAGAACACAGGGATGAGCGTCAAGGATGGGAGAAGGG GAGATCCAGAGAACCTGACGCGGGCCCTAATTGATAGTGTTCTTTTCTTTAGTAGCTGTAGCTAGGATTCTGTGT CTTCGGTGCCAGAGGGGCCCGCTTCCCTGAACTCTTCCAGCGTCGGGAAGTCCCTGATACCAGGCGCCAG ATCGTGTATTTCACGAATTCATTCAAAAACCTTTATCAGGCCTTGGAGATGTTAAAAGAATTTACAGCCTAGTGG AAGACACAGATTCCTAATTAGTCCAAATTTACTCCTAACACCTGCAATCATCCTACAAGATCTTAATGTTTATGT GCCTCATTTATCTAAAACCCTGAACTTTGGCTGCCTGTGAATCCTCAGGTCCATTTCAGCAACCCACTTTTGCAT GCTGTACCTTTGATATCATCTGAAACTGCTTACATTGTCTCCGGTATCAGAATCTAACAGTATATGCTGATCTCC ACGTTCTAGCAAATTTTGTTTACCAGCAATAATAGGAGCAACCTGCTCTCGAGAGTCCATATTCTGATCCCTAAA TGTATTAGAGCCACAGTGGGGCCTGGAACACTGCCTTAACACCTGGGCTAAGTCCTCTTATATCTCGTAGTGAAC ACCTTATGTATGTAAGGTGTCCCCAGCCCCGGGCCACAAACGGGTACCAGCCCATGGCCTGTTAGGAACCGGGC TACACAGCAAGAAGTGAATCTCTGGCAAGCCAGGGAAGCTTAATCTGTATTTACAGCTGCTCCCCATGGTTCACA TTATCGTCTGAGCTCCACCTCCTGTCAGATCAGCTGTGGCATGAGATTCTCATAGGAGCTGGAACTACTGTGAAC TAGGCATGAGAGGGATCTAGGTTATGCTCCTTATGAGAATCTAATGCCTGATGATCTGTCACTGTCTCCCATCAC CCCCAGATGGGACCATCTAGTTGCAGGAAAATAAGCTCAGGGCTCCCACCGATTCTACATTATGGTGAGTTGTGT

PCT/US2003/028547

1184/6881 FIGURE 1104

 ${\tt MALLPSLQSLDLGLELGDFRRGSIVRDPGHSIQNLTTGKREGDPSSRGQISQGTRVFPPRPHSQRGVSDEWENLK} \\ {\tt YGSEIMQVRTLALGENS}$

PCT/US2003/028547

FIGURE 1105

PCT/US2003/028547

FIGURE 1106

PCT/US2003/028547

FIGURE 1107

MVHIACKIAELKEKIDCRSGKKPEDCPKFLKSDDAAIIDMVPGKPMCVESFSELFVSIGHLSLVVKDWLMITMHH KTFRWKGECFVDHFGFLFCIWQF

PCT/US2003/028547

FIGURE 1108

PCT/US2003/028547

FIGURE 1109

MSGALDVLQMKEEDVLKFLAAGTHLGGTNLDFQMEQYIYKRKSDGIYIINLKRTWEKLLLAARAIVAIENPADVS VISSRNTGQRAVLKFAAATGATPIAGRFTPGTFTNQIQAAFREPRLLVVTDPRADHQPLTEASYVNLPTIALCNT DSPLRYVDIAIPCNNKGAHSVGLMWWMLAREVLRMRGTISREHPWEVMPDLYFYRDPEEIEKEEQAAAEKAVTKE EFQGEWTAPAPEFTATQPEVADWSEGVQVPSVPIQQFPTEDWSAQPATEDWSAAPTAQATEWVGATTDWS

PCT/US2003/028547

FIGURE 1110

PCT/US2003/028547

FIGURE 1111

 $\label{thm:constraint} MVFRRFVEVGRVAYVSFGPHAGKLVAIVDVIDQNRALVDGPCTQVRRQAMPFKCMQLTDFILKFPHSAHQKYVRQ\\ AWQKADINTKWAATRWAKKIEARERKAKMTDFDRFKVMKAKKMRNRIIKNEVKKLQKAALLKASPKKAPGTKGTA\\ AAAAAAAAAAAKVPAKKITAASKKAPAQKVPAQKATGQKAAPAPKAQKGQKAPAQKAPAPKASGKKA\\ \\$

PCT/US2003/028547

FIGURE 1112

GCAGGCTGGCTTTCCTCTCGCAGCGCGGTGTGGAGTCCTGTCCTGCCTCAGGGCTTTTCGGAGCCTGGATCCTCA TGAATAAAGGGGCGCAGGGCAGGCGCAAGTGGCAGAGCCTTCGTTTGCCAAGTCGCCTCCAGACCGCAGACATGA GGTGCGCCGTATCCCAACCCGAGGCCACAAAATGCTTCCAATGGCAAAGGAATATGAGAAAAGTGCGTGGCCCTC CTGTCAGCTGCATAAAGAGAGACTCCCCCATCCAGTGTATCCAGGCCATTGCGGAAAACAGGGCCGATGCTGTGA CCCTTGATGGTGGTTTCATATACGAGGCAGGCCTGGCCCCCTACAAACTGCGACCTGTAGCGGCGGAAGTCTACG GGACCGAAAGACAGCCACGAACTCACTATTATGCCGTGGCTGTGGTGAAGAAGGGCGGCAGCTTTCAGCTGAACG TTCCCGGTGCAGATAAAGGACAGTTCCCCAACCTGTGTCGCCTGTGTGCGGGGACAGGGGAAAACAAATGTGCCT TCTCCTCCCAGGAACCGTACTTCAGCTACTCTGGTGCCTTCAAGTGTCTGAGAGACGGGGGCTGGAGACGTGGCTT TTATCAGAGAGAGCACAGTGTTTGAGGACCTGTCAGACGAGGCTGAAAGGGACGAGTATGAGTTACTCTGCCCAG ACAACACTCGGAAGCCAGTGGACAAGTTCAAAGACTGCCATCTGGCCCGGGTCCCTTCTCATGCCGTTGTGGCAC GAAGTGTGAATGGCAAGGAGGATGCCATCTGGAATCTTCTCCGCCAGGCACAGGAAAAGTTTGGAAAGGACAAGT CACCGAAATTCCAGCTCTTTGGCTCCCCTAGTGGGCAGAAAGATCTGCTGTTCAAGGACTCTGCCATTGGGTTTT CGAGGGTGCCCCCGAGGATAGATTCTGGGCTGTACCTTGGCTCCGGCTACTTCACTGCCATCCAGAACTTGAGGA AAAGTGAGGAGGAAGTGGCTGCCCGGCGTGCGCGGTCGTGTGGTGTGCGGTGGGCCAGCAGCAGCAGCAAGT GTAACCAGTGGAGTGGCTTGAGCGAAGGCAGCGTGACCTGCTCCTCGGCCTCCACCACAGAGGACTGCATCGCCC TGCCTGTCCTGGCAGAGAACTACAAATCCCAACAAAGCAGTGACCCTGATCCTAACTGTGTGGATAGACCTGTGG AAGGATATCTTGCTGTGGCGGTGGTTAGGAGATCAGACACTAGCCTTACCTGGAACTCTGTGAAAGGCAAGAAGT CCTGCCACACCGCCGTGGACAGGACTGCAGGCTGGAATATCCCCATGGGCCTGCTCTTCAACCAGACGGGCTCCT GCAAATTTGATGAATATTTCAGTCAAAGCTGTGCCCCTGGGTCTGACCCGAGATCTAATCTCTGTGCTCTGTGTA TTGGCGACGAGCAGGGTGAGAATAAGTGCGTGCCCAACAGCAACGAGAGATACTACGGCTACACTGGGGCTTTCC GGTGCCTGGCTGAGAATGCTGGAGACGTTGCATTTGTGAAAGATGTCACTGTCTTGCAGAACACTGATGGAAATA ACAATGACGCATGGGCTAAGGATTTGAAGCTGGCAGACTTTGCGCTGCTGTGCCTCGATGGCAAACGGAAGCCTG GCCTGAAACAGGTGTTGCTCCACCAACAGGCTAAATTTGGGAGAAATGGATCTGACTGCCCGGACAAGTTTTGCT TATTCCAGTCTGAAACCAAAAACCTTCTGTTCAATGACAACACTGAGTGTCTGGCCAGACTCCATGGCAAAACAA CATATGAAAAATATTTGGGACCACAGTATGTCGCAGGCATTACTAATCTGAAAAAGTGCTCAACCTCCCCCCTCC TGGAAGCCTGTGAATTCCTCAGGAAGTAAAACCGAAGAAGATGGCCCAGCTCCCCAAGAAAGCCTCAGCCATTCA TGCTTACAATTCCCTGCTGTCGTCTTAGCAAGAAGTAAAATGAGAAATTTTGTTGATATTC

WO 2004/030615 PCT/US2003/028547

1193/6881 FIGURE 1113

GCTTCTAAACAACCTACCCTCCTCCCCATTTTCTGTGGTCCAACTACCCTCGGCGATCCCAGGCTTGGCGGGGC CCATCAAAATGAAGTTATTAATTATATGCGTTTTGCTCGTTCAAAGAGAGGCTTGAGACTCAAAACTGTAGATTC CTGCTTCCAAGACCTCAAGGAGAGCAGCTGGTGGAGGACACCTTCACCATAGATGAAGTCTCTGAAGTCCTCAA TGGATTACAAGCTGTGGTTCATAGTGAGGTGGAATCTGAGCTCATCAACACTGCCTATACCAATGTGTTACTTCT AAAGCCAAAACTTGCTCCACTTAATGAAGGTGGAACAGCAGAACTCCTAAACAAGGAAATTTTAAGACTTCAAGA AGAGAATGAGAATTGAAGTCAAGGTTGAAGACCATTGAAATACAGGCTACAAATGCACTGGATGAAAAGTCAAA ACTAGAAAAAGCACTGCAAGATTTACAGCTTGATCAAGGAAATCAAAAGGATTTTATAAAGGCCCAAGACTTAAG TAACTTAGAAAACACTGTCGCTGCCTTAAAGAGTGAGTTTCAGAAGACACTTAATGACAAGACAGAAAAACCAGAA GTCACTGGAGGAGAATCTGGCGACAGCCAAGCACGATCTACTCAGGGTTCAGGAGCAGCTGCACATGGCTGAAAA GGAATTAGAAAAGAAATTTCAGCAAACAGCAGCTTATCGAAACATGAAAGAGATTCTTACCAAGAAGAATGACCA AATCAAAGATCTGAGGAAAAGACTGGCACAATATGAACCTGAAGATTAAAACTGAAGATTTCCTCTGGAAGCTAC CACATGCAAACATACAAGCAGTCTCACCTCAGGCATGTATTTTGAAAAGCATTTTGTCATATCCCCTCTCTTAT TTTTCTAATATTTAGACTTTGAATATTTAGAACTAGAGTTCCTATTTTCAGCTAGTTGAAAACAGAGAAAACCTA GTGATTCTGTCTGGTCATCCCACACCCCTCTCTACTGAGTGCTCCAGAGTCTTAGCTCACATGCACTGAGAATTC TTTACAGCAAAGAAGATTTTTAGAGTGGGAAGAAGAGGCTTATCCTTCTGCATTAGTATAAAGAGTCTGTATT AATTCATTTACTCTATTTGATGATAAACTATAAATTCATTGAAAATGTGAATTCTATTATGGGTAGCCTTTTTAC CAATTATAAGGAAAATTTACAGCAGTGAACATGAACATTCACTTAGCTTCCTCAGTCTCTCCATCTTAAAGATCA TTTATCAGAGGAGGTTCAGCATTTTTTGCAGCATAACTTTTCATGAGTCTGTATTACTAATGGATAAGTCAAATC CATCCTGCACTTCTACAGTTTAGAAAGTATCTGGACTCAGAATAAATGTAATATTTATACTTGTTTCCAGAATGT TATTTTACATTTTATGTTCAATAAGAACACTTTTTAAAAGACGTATATTCAACATAAAATCAGCTATCAGACTTC AGATTAGACTTTATTTATGTGGGTCTATAATAATTGTATTTTCAAGAGGTTTTCACTATATTTGTATTGGCCTGG TTTTCTCAGACGATTTTGGACAAATCATTAGAAACTGGGCATCATATCCACAGTTATGTAAGGCAGTGATATACT ATAAGGATAAACAAAGTCAATAAAGCAATAATCCCTCAGAAGGAAAGTCCTTACTTTTCACATATTAATA TTTAGTAATTTTTCCTGCTTCTAAAAGTGAGAGTATCACACCCTAAATGAACACTGTCTACTAAGAGACATCATT ${\tt CCATTTCCACAAATGAAGATTTTATTCCAAGAAACGAGTTTACTGATTGGAGCATAGGGCTTGTTGTTATTTTTA}$ TTCAAGCTTTTAGTAATAGCCTTGAATTTATTATTTTTCTTATAGGCTTTTTGTTAAAATAGTGAAGGAACAAAT GTTAAAGGGTAAGATAATTTCCCTGCAAAAGGACACAGAAGGCAGTCTTAAGAAGATGAATGGATGAGAGAAGGG AGAGAATAAAATGCAATAACGAGCCAGCATTTACTATGTATTTTCTCCTCACCTGTCTCTCCATATTTAGGTCAC TTACCAGTTTCTGTGCCCTTTTGGAGCTTTTGTTGAGGGCTTCATTCTCACCCTGTATTTCTTTAGCCCTAAATT GACACTCTCCCAAAAATCCATTCCATTGTCTGTGGACCAAGATGTTCTATGTAATTCAGAAGCAGAACTCTTGG CTAAAGGGCTAGTGTGGCCTTCAGAAACCATTCAATTATTTTCTCCCTACACCTTTGTCAGTTTGAAACCAGTGA GGAAAAAAGGTATGTTGATAAGAAACCTATATTGCTAGGTAGAATTTGTACTTGTTTTCTTGGTAGCAGTTTTGA AATATTCTGTACAGTACGTTCCTATTGTTTAATAATAAATTCAAAAATATTTCTAAAACCTTAAAACCAACTATG CCAAGCATTAAGATAAACAAATATGATGTTCTTTGACGTAAATCAACGTGATGATTCTTTCACATGTAAACACAT TTTAGTGTTTCTGGTTTGTCATTTTTGTTGTTGTTGTTGTTGTTGTTATTTACTCTATACCCTTTAGCAAAATAC TTTCATATATATATATTGGATTTCTAAGGATGGTGGTTTTGAGCCTTGATTAGACTTTTGATGTGCTAAGCCAG ACAGGCAGTCTGTACATTGATGGCCATCACAATGCAGCTTTGGTTTAATTTAATTCAGGCCTGCTGAGTTAT GCACAGACTTTTTGTTGACCAAAATAAAATATAAAGGGTTTTCTTCTGTTTGACATTTGTGTTCATTTTTTCTCT TTATGTATTACATTTTAACCTATATTAAATAAATGTTTAAATGATAATTTGCTTATGTCTTATAAAACTCAGCAT AAGAAAAAT

PCT/US2003/028547

FIGURE 1114

MAELGLNEHHQNEVINYMRFARSKRGLRLKTVDSCFQDLKESRLVEDTFTIDEVSEVLNGLQAVVHSEVESELIN TAYTNVLLLRQLFAQAEKWYLKLQTDISELENRELLEQVAEFEKAEITSSNKKPILDVTKPKLAPLNEGGTAELL NKEILRLQEENEKLKSRLKTIEIQATNALDEKSKLEKALQDLQLDQGNQKDFIKAQDLSNLENTVAALKSEFQKT LNDKTENQKSLEENLATAKHDLLRVQEQLHMAEKELEKKFQQTAAYRNMKEILTKKNDQIKDLRKRLAQYEPED

PCT/US2003/028547

FIGURE 1115

PCT/US2003/028547

1196/6881 FIGURE 1116

MASVTLSEAEKVYIVHGVQEDLRVDGRGCEDYRCVEVETDVVSNTSGSARVKLGHTDILVGVKAEMGTPKLEKPN EGYLEFFVDCSASATPEFEGRGGDDLGTEIANTLYRIFNNKSSVDLKTLCISPREHCWVLYVDVLLLECGGNLFD AISIAVKAALFNTRIPRVRVLEDEEGSKDIELSDDPYDCIRLSVENVPCIVTLCKIGYRHVVDATLQEEACSLAS LLVSVTSKGVVTCMRKVGKGSLDPESIFEMMETGKRVGKVLHASLQSVVHKEESLGPKRQKVGFLG

PCT/US2003/028547

1197/6881 FIGURE 1117

PCT/US2003/028547

1198/6881 FIGURE 1118

 ${\tt VPKRKAEGDAKGDKAKVKDEPQRRSMRFSAKPAPPKPEPKPKKAPAKKGEKIPKGKKGKADAGEEGNNPAENGDAKTDQAQKAEGAGGAK}$

WO 2004/030615 PCT/US2003/028547

1199/6881 FIGURE 1119

AAGCCTCTCGGTCTGTGGCAGCAGCGTTGGCCCGGGCCCCGGGAGCGGAGAGCGAGGGGAGAGGCGAGACGGAGAAA GGTCTGAGGAGCAGCTTCAGTCCCCGCCGAGCCGCCACCGCAGGTCGAGGACGGTCGGACTCCCGCGGCGGAGG AGCCTGTTCCCCTGAGGGTATTTGAAGTATACCATACAACTGTTTTGAAAATCCAGCGTGGACAATGGCTACTCA TTACCTGGACTCTGGAATCCATTCTGGTGCCACTACCACAGCTCCTTCTCTGAGTGGTAAAGGCAATCCTGAGGA AGAGGATGTGGATACCTCCCAAGTCCTGTATGAGTGGGAACAGGGATTTTCTCAGTCCTTCACTCAAGAACAAGT AGCTGATATTGATGGACAGTATGCAATGACTCGAGCTCAGAGGGTACGAGCTGCTATGTTCCCTGAGACATTAGA TGAGGGCATGCAGATCCCATCTACACAGTTTGATGCTGCTCATCCCACTAATGTCCAGCGTTTGGCTGAACCATC ACAGATGCTGAAACATGCAGTTGTAAACTTGATTAACTATCAAGATGATGCAGAACTTGCCACACGTGCAATCCC TGAACTGACAAAACTGCTAAATGACGAGGACCAGGTGGTGGTTAATAAGGCTGCAGTTATGGTCCATCAGCTTTC TACAAATGATGTAGAAACAGCTCGTTGTACCGCTGGGACCTTGCATAACCTTTCCCATCATCGTGAGGGCTTACT GGCCATCTTAAGTCTGGAGGCATTCCTGCCCTGGTGAAAATGCTTGGTTCACCAGTGGATTCTGTGTTGTTTTA TGCCATTACAACTCTCCACAACCTTTTATTACATCAAGAAGGAGCTAAAATGGCAGTGCGTTTAGCTGGTGGGCT GCAGAAAATGGTTGCCTTGCTCAACAAAACAAATGTTAAATTCTTGGCTATTACGACAGACTGCCTTCAAATTTT AGCTTATGGCAACCAAGAAAGCAAGCTCATCATACTGGCTAGTGGTGGACCCCAAGCTTTAGTAAATATAATGAG GCCGGCTATTGTAGAAGCTGGTGGAATGCAAGCTTTAGGACTTCACCTGACAGATCCAAGTCAACGTCTTGTTCA GAACTGTCTTTGGACTCTCAGGAATCTTTCAGATGCTGCAACTAAACAGGAAGGGATGGAAGGTCTCCTTGGGAC TGGTGACAGGGAAGACATCACTGAGCCTGCCATCTGTGCTCTTCGTCATCTGACCAGCCGACACCAAGAAGCAGA GCCTCTGATAAAGGCTACTGTTGGATTGATTCGAAATCTTGCCCTTTGTCCCGCAAATCATGCACCTTTGCGTGA GCAGGGTGCCATTCCACGACTAGTTCAGTTGCTTGTTCGTGCACATCAGGATACCCAGCGCCGTACGTCCATGGG TGGGACACAGCAGTTTGTGGAGGGGGTCCGCATGGAAGAATAGTTGAAGGTTGTACCGGAGCCCTTCACAT TTCTCCCATTGAAAACATCCAAAGAGTAGCTGCAGGGGTCCTCTGTGAACTTGCTCAGGACAAGGAAGCTGCAGA AGCTATTGAAGCTGAGGGAGCCACAGCTCCTCTGACAGAGTTACTTCACTCTAGGAATGAAGGTGTGGCGACATA TGCAGCTGCTGTTTTGTTCCGAATGTCTGAGGACAAGCCACAAGATTACAAGAAACGGCTTTCAGTTGAGCTGAC CAGCTCTCTCTCAGAACAGAGCCAATGGCTTGGAATGAGACTGCTGATCTTGGACTTGATATTGGTGCCCAGGG AGAACCCCTTGGATATCGCCAGGATGATCCTAGCTATCGTTCTTTTCACTCTGGTGGATATGGCCAGGATGCCTT GGGTATGGACCCCATGATGGAACATGAGATGGGTGGCCACCACCCTGGTGCTGACTATCCAGTTGATGGGCTGCC AGATCTGGGGCATGCCCAGGACCTCATGGATGGGCTGCCTCCAGGTGACAGCAATCAGCTGGCCTGGTTTGATAC TGACCTGTAAATCATCCTTTAGCTGTATTGTCTGAACTTGCATTGTGATTGGCCTGTAGAGTTGCTGAGAGGGCT CGAGGGGTGGGCTGGTATCTCAGAAAGTGCCTGACACACTAACCAAGCTGAGTTTCCTATGGGAACAATTGAAGT AAACTTTTTGTTCTGGTCCTTTTTGGTCGAGGAGTAACAATACAAATGGATTTTGGGAGTGACTCAAGAAGTGAA CAGTAACTGTTTTTTAAGTCTCTCGTAGTGTTAAGTTATAGTGAATACTGCTACAGCAATTTCTAATTTTTAAGA TAGCCTTTTTGTATAAAATAGACAAATAGAAAATGGTCCAATTAGTTTCCTTTTTAATATGCTTAAAATAAGCAG TTTGGAACCTTGTTTTGGACAGTTTACCAGTTGCCTTTTATCCCAAAGTTGTTGTAACCTGCTGTGATACGATGC TTCAAGAGAAAATGCGGTTATAAAAAATGGTTCAGAATTAAACTTTTAATTCATT

PCT/US2003/028547

FIGURE 1120

PCT/US2003/028547

1201/6881 FIGURE 1121

PCT/US2003/028547

1202/6881 FIGURE 1122A

AGTTGCCTAGTCGCGGCTACGGCGTCATGGAGGAGATCCGGCGGCAGGGCAAGCTGTGCGACGTGACCCTCAAGA TTGGGGACCACAAATTCAGTGCCCACCGGATTGTCTTAGCAGCCTCGATCCCGTATTTCCATGCTATGTTTACAA ATGACATGATGGAGTGCAAGCAGGATGAGATTGTAATGCAAGGAATGGACCCAAGTGCCCTGGAGGCTCTGATCA AGCTGCAGAGCATCAAAGACGCCTGCTGCACATTCCTTCGAGAACGGCTTCACCCAAAAAACTGCCTGGGTGTGC GCCAGTTTGCTGAGACAATGATGTGTGCTGTGCTGTACGACGCTGCCAACAGCTTCATCCACCAGCACTTTGTGG AGGTGTCCATGTCAGAAGAGTTCCTGGCCCTTGCAAGACGTGCTTGAGCTGGTGTCTCGGGATGAGCTGA ATGTCAAATCTGAGGAGCAGGTCTTTGAAGCTGCATTGGCCTGGGTCAGATACGACCGGGAGCAGAGGGGTCCCT ATGACCTGGTGCGTTGCTGCCACAAATGCAGGGACCTGGTAGACGAAGCAAAGGACTACCACCTCATGCCAGAGC GGGGCCTCAACTCAGCAGGTGATTCCCTGAATGTGGTGGAAGTGTTCGACCCCATTGCCAATTGCTGGGAGAGAT GCCGTCCCATGACAACAGCCCGCAGCCGCGTTGGCGTGGCTGTGGTGAACGGGCTTCTCTATGCCATCGGAGGAT TGAATAGCAAGAGAAGTGCCATGGGGACAGTCGTGCTGGATGGCAGATCTACGTCTGTGGGGGCTACGATGGCA ACTCTTCCCTCAGCTCCGTGGAGACCTACTCACCTGAGACGGACAAATGGACAGTGGTGACCTCGATGAGCTCGA ${\tt ATCGCAGTGCTGCGGGGTTACAGTCTTTGAGGGCAGGATATATGTGTCAGGCGGCCATGATGGTTTGCAGATCT}$ TCAGCAGTGTGGAACACTACAACCACCACACACCCCTGCCACCTGCCAGCTGGCATGCTCAACAAGCGCTGCC GGCACGGAGCCGCCTCCCTGGGGAGCAAGATGTTTGTCTGCGGGGGCTACGATGGCTCTGGCTTCCTCAGCATTG CCGAGATGTACAGCTCTGTGGCAGACCAGTGGTGCCTGATTGTCCCCATGCACACGCGCAGGAGCCGGGTCTCCC TGGTGGCCAGCTGTGGGCCCTCTACGCTGTTGGGGGCTACGACGGACAGTCAAACCTAAGCTCAGTGGAGATGT TCCCTCTCCTCACCATCTAAGGCAGAGGATGGGGATGTGGTGGGGCAGGGATCTGGTACAGACATAGGCGCTTCCT TCCAGGAACAGTCCCTCAGGAGAGGCAGTGGACCAGAAGAGATGGCGAAACGTGAGCTCGCCGGAGGTACAGTTT TTCCAGGTGCTTAAGCCCTCCCCCACTGTGCCACCCTTGTGACCTTCAGGCTTGGGTCATCAAGATGCACAGCAT GGAACACAAGCTCCTCTGGATCCTGCAGCTGGTGACATGGAACTGTTTTCTGGTCCACATGAACACAGGCTCCAT CCAGGCCCAGCTCCTACCCACCGCCTCTCTGTGGGCCAGCTGTTCACAGAAGGCCTTCCATCTGATGCTCCCCAT CGCCTGCTTGCTCCCAGCCGAGTCTGGCCAATTTGCCATGGGGAGGCTGCAGTGTCCAAGCCTGCTGGAAACTG CTGCACACAGGCACATTCCTTCTTCCACAGTGGGGCACCAAGGATTCTGTCCTCATTGCTGGGTAAGCAGGGAGA AGAGAAGTTTTCCCCATGTCTAATTTTGGGATTTCAGTGAGGCCTTTTGATCTGTCCAGGAGAACAGAAGGGAAA TTTTATGTGAACAAATTTTGCAAGAAGAAAAAGCATAAAAGACACTAACGGCAAATCTATGTTTAAATGGAAAA TCGTCTAACTGGAGAAGGGCGGTATCCACCCCACATTCGGATCCCAGGGTCCTGAGGCCTCGCATTGAGCTGGGG GTTCCCTCTGAGCCCCAGTGTGTGGGAATCAGTGCACTCTTGACTGGGCCTGTAGTAAGGTGCTCATGGGGTTT GTCTTCTCACCCACCATCAGAGGACTTTTAAAATCATAGGCGTAGAGAGTTAGGCTATCTGCTGAATTACTGCCA CTCTTCTTGGTGGGGGCTCCTAGCTGTGGCTGGGGGCTCCAGGCGCCCCTGTGATTACCTCCTACTGCCACCATG GCGCTCATTCAGATTCCCCACTCTCACTAACATTGCTTCCTTTTTTGACCAGCAGGAAACAGCAGGTCTGGCCAG ATTCTCACTTGCCCATCAATCTCGTTCTTGGATGATTTCCCTCATTGTGATGCTTCTGGGGCACGTTGACCATAT CAAGGTGGACCTTTACATTCAAGCACAGCTGGCTTTTATGACATAAAGAACTAAAGGCCGAAAGAATCTCTTGCT GCTGCAAAGAACAGATTTTATATTTCTTCCTCTAATCTTGGCAAATGACCTTTACCTTTTGGAAAGATTTCATAT TGCTTCCTCCCTGGATAGGACCTAATGTAGCACAGCGGGACTCAAAGAGGGAGACATTTTCTCTTGCCAGTG CACTGGGCAGTGGGGCTGTCCTTCAACTGCTGCCCAAAATTGGTTTTCTAAAATTCTTCCAGTAGAGACTAAA AGAAGATTCAATTCCTGTAACCCAAGACTGAGTCTTAGGGCTCCAGTCTCCACCTGCTTGGTTTCCTATCCTTTG CTGCCTGCCTGGGGTGGCCTGGAAGCCTGTTCAGAAAGGCACAATGTGGAGCCTGGGGTGTCTCCCCCACCCCAG

PCT/US2003/028547

1203/6881 FIGURE 1122B

WO 2004/030615 PCT/US2003/028547

1204/6881 FIGURE 1123A

GTCGCCGCCGCCGCCGCCGCAGCTTGGGAGGTGCTGCCACCACAGGTACCTGCACATGTTGTTCTTTGTCAG TGCTGTCAAGTGTGCCAGGGTGATCCATGGTCACTTTCCGGGATGGCAGCAAGGTGACTTCGGCTGAGGATGA CCCTGACTGAAAGGCTGCGTGAGAAGATATCTCGGGCCTTCTACAACCATGGGCTCCTCTGTGCATCCTATCCCA TCCCCATCATCCTCTTCACAGGGTTCTGCATCTTAGCCTGCTGCTACCCACTGCTGAAACTCCCCTTGCCAGGAA CAGGACCTGTGGAATTCACCACCCTGTGAAGGATTACTCGCCCCCACCTGTGGACTCTGACCGCAAACAAGGAG AGCCTACTGAGCAGCCTGAGTGGTATGTGGGTGCCCCGGTGGCTTATGTCCAGCAGATATTTGTGAAGTCCTCAG TGTTTCCCTGGCACAAGAACCTCCTGGCAGTAGATGTATTTCGTTCACCTTTGTCCCGGGCATTCCAACTGGTGG AGGAGATCCGGAACCACGTGCTGAGAGACAGCTCTGGGATCAGGAGCTTGGAGGAGTTGTGTCTGCAAGTGACCG TCTGGCAGAATGACTGGGAACGCTTCCATGCTGATCCTGACATCATTGGGACCATCCACCAGCACGAGCCTAAAA $\verb|CCCTGCAGACTTCAGCCACACTCAAAGACTTGTTATTTGGTGTTCCTGGGAAGTACAGCGGGGTGAGCCTCTACA||$ CCAGGAAGAGGATGGTCTCCTACACCATCACCCTGGTCTTCCAGCACTACCATGCCAAGTTCCTGGGCAGCCTGC GTGCCCGCCTGATGCTTCTGCACCCCAGCCCCAACTGCAGCCTTCGGGCGGAGAGCCTGGTCCACGTGCACTTCA AGGAGGAGATTGGTGTCGCTGAGCTCATCCCCCTTGTGACCACCTACATCATCTTGTTTGCCTACATCTACTTCT CCACGCGGAAGATCGACATGGTCAAGTCCAAGTGGGGGCTGGCCCTGGCTGCCGTGGTCACAGTGCTCAGCTCGC TGCTCATGTCTGTGGGACTCTGCACACTCTTCGGCCTGACGCCCACCCTCAATGGCGGCGAGATTTTCCCCTACC TTGTGGTGGTTATTGGGTTAGAGAATGTGTTGGTGCTCACCAAGTCTGTGGTCTCAACCCCGGTAGACCTGGAGG TGAAGCTGCGGATCGCCCAAGGCCTAAGCAGCGAGAGCTGGTCCATCATGAAGAACATGGCCACGGAGCTGGGCA TCATCCTCATCGGCTACTTCACCCTAGTGCCCGCCATCCAGGAGTTCTGTCTCTTTGCTGTCGTGGGGGCTGGTGT CTGACTTCTTCCTTCAGATGCTGTTTTTCACCACTGTCCTGTCCATTGACATTCGCCGGATGGAGCTAGCAGACC TGAACAAGCGACTGCCCCTGAGGCCTGCCTCAGCCAAGCCAGTGGGACAGCCAACGCGCTACGAGCGGC GGATTGGCATCCTGGTATACACAGACCCAGCAGGGCTGCGCAACTACCTCGCTGCCCAGGTGACGGAACAGAGCC CATTGGGTGAGGGAGCCCTGGCTCCATGCCCGTGCCTAGTGGCATGCTGCCCCCAGCCACCCGGACCCTGCCT TCTCCATCTTCCCACCTGATGCCCCTAAGCTACCTGAGAACCAGACGTCGCCAGGCGAGTCACCTGAGCGTGGAG GTCCAGCAGAGGTTGTCCATGACAGCCCAGTCCCAGAGGTAACCTGGGGGCCTGAGGATGAGGAACTTTGGAGGA AATTGTCCTTCCGCCACTGGCCGACGCTCTTCAGCTATTACAACATCACACTGGCCAAGAGGTACATCAGCCTGC TGCCCGTCATCCCAGTCACGCTCCGCCTGAACCCGAGGGGGGCTCTGGAGGGCCGGCACCCTCAGGACGGCCGCA GTGCCTGGCCCCACCGGGGCCCATACCTGCTGGGCACTGGGAAGCAGGACCCAAGGGCCCAGGTGGGGTGCAGG CCCATGGAGACGTCACGCTGTACAAGGTGGCGGCGCTGGGCCTGGCCACCGGCATCGTCTTGGTGCTGCTGC AGCTGCCCTGCGACGACTACGGCTATGCGCCACCCGAGACGGAGATCGTGCCGCTTGTGCTGCGCGGCCACCTCA TGGACATCGAGTGCCTGGCCAGCGACGGCATGCTGCTGGTGAGCTGCCTGGCAGGCCACGTCTGCGTGTGGG ACGCGCAGACCGGGGATTGCCTAACGCGCATTCCGCGCCCAGGGCAGCGCCGGGACAGTGGCGTGGGCAGCGGGC TTGAGGCTCAGGAGGCTGGGAACGACTTTCAGATGGTGGGAAGGCTGGTCCAGAGGAGCCTGGGGACAGCCCTC CCCTGAGACACCGCCCCGGGGCCCTCCGCCGCCTTCCCTCTTCGGGGACCAGCCTGACCTCACCTGCTTAATTG ACACCAACTTTTCAGCGCAGCCTCGGTCCTCACAGCCCACTCAGCCCGAGCCCCGGCACCGGGCGGTCTGTGGCC GCTCTCGGGACTCCCCAGGCTATGACTTCAGCTGCCTGGTGCAGCGGGTGTACCAGGAGGAGGGGCTGGCGGCCG TCTGCACACCAGCCTGCGCCCACCCTCGCCTGGGCCGGTGCTGTCCCAGGCCCCTGAGGACGAGGGTGGCTCCC CCGAGAAAGGCTCCCTTCCCTCGCCTGGGCCCCCAGTGCCGAGGGTTCCATCTGGAGCTTGGAGCTGCAGGGCA ACCTCATCGTGGTGGGGCGGAGCAGCCGCCGGCTGGAGGTGTGGGACGCCATTGAAGGGGTGCTGTGCTGCAGCA GCGAGGAGGTCTCCTCAGGCATTACCGCTCTGGTGTTCTTGGACAAAAGGATTGTGGCTGCACGGCTCAACGGTT GTTCCCCTGCCTCTCCAGTGTACAGCAGCAGCAGCACAGTGGCCTGTCACCTGACCCACACAGTGCCCTGTGCAC ACCAAAAACCCATCACAGCCCTGAAAGCCGCTGCTGGGGCGCTTGGTGACTGGGAGCCAAGACCACACACTGAGAG TGTTCCGTCTGGAGGACTCGTGCTGCTCTTCACCCTTCAGGGCCCACTCAGGGGCCATCACGACCGTGTACATTG

PCT/US2003/028547

FIGURE 1123B

PCT/US2003/028547

1206/6881 FIGURE 1124

MTLTERLREKISRAFYNHGLLCASYPIPIILFTGFCILACCYPLLKLPLPGTGPVEFTTPVKDYSPPPVDSDRKQ GEPTEQPEWYVGAPVAYVQQIFVKSSVFPWHKNLLAVDVFRSPLSRAFQLVEEIRNHVLRDSSGIRSLEELCLQV TDLLPGLRKLRNLLPEHGCLLLSPGNFWQNDWERFHADPDIIGTIHQHEPKTLQTSATLKDLLFGVPGKYSGVSL YTRKRMVSYTITLVFQHYHAKFLGSLRARLMLLHPSPNCSLRAESLVHVHFKEEIGVAELIPLVTTYIILFAYIY FSTRKIDMVKSKWGLALAAVVTVLSSLLMSVGLCTLFGLTPTLNGGEIFPYLVVVIGLENVLVLTKSVVSTPVDL EVKLRIAQGLSSESWSIMKNMATELGIILIGYFTLVPAIQEFCLFAVVGLVSDFFLQMLFFTTVLSIDIRRMELA DLNKRLPPEACLPSAKPVGQPTRYERQLAVRPSTPHTITLQPSSFRNLRLPKRLRVVYFLARTRLAQRLIMAGTV VWIGILVYTDPAGLRNYLAAQVTEQSPLGEGALAPMPVPSGMLPPSHPDPAFSIFPPDAPKLPENQTSPGESPER GGPAEVVHDSPVPEVTWGPEDEELWRKLSFRHWPTLFSYYNITLAKRYISLLPVIPVTLRLNPREALEGRHPQDG ${\tt RSAWPPPGPIPAGHWEAGPKGPGGVQAHGDVTLYKVAALGLATGIVLVLLLLCLYRVLCPRNYGQLGGGPGRRRR}$ GELPCDDYGYAPPETEIVPLVLRGHLMDIECLASDGMLLVSCCLAGHVCVWDAQTGDCLTRIPRPGQRRDSGVGS ${\tt GLEAQESWERLSDGGKAGPEEPGDSPPLRHRPRGPPPPSLFGDQPDLTCLIDTNFSAQPRSSQPTQPEPRHRAVC}$ GRSRDSPGYDFSCLVQRVYQEEGLAAVCTPALRPPSPGPVLSQAPEDEGGSPEKGSPSLAWAPSAEGSIWSLELQ ${\tt GNLIVVGRSSGRLEVWDAIEGVLCCSSEEVSSGITALVFLDKRIVAARLNGSLDFFSLETHTALSPLQFRGTPGR}$ GSSPASPVYSSSDTVACHLTHTVPCAHQKPITALKAAAGRLVTGSQDHTLRVFRLEDSCCLFTLQGHSGAITTVY ${\tt IDQTMVLASGGQDGAICLWDVLTGSRVSHVFAHRGDVTSLTCTTSCVISSGLDDLISIWDRSTGIKFYSIQQDLG}$ CGASLGVISDNLLVTGGQGCVSFWDLNYGDLLQTVYLGKNSEAQPARQILVLDNAAIVCNFGSELSLVYVPSVLE KLD

PCT/US2003/028547

FIGURE 1125

GTTCTCTTCGCCCGGTCCCTGCCGCGCACAGGCCTCGGGGGTCGGCGGGAGCACGATGGCGGCCGCTAGGAGACTC ATGGCGCTGGCCGCCATCTCTCCGCGCCTGCAGCCGCTGGGTCCCCGCGCTGCTGGGCGACAGGGTCGCTCG CGCGGCTTCTCTTCAAGCTGCGCCCACCCCGACCACACAAGGAAGCCGCCGAGGCCGAGTCAGGGATGGCCCCC GGCGGGCCTGGGGAAGGCGAAGCTTGGTGAACGCTTCTAGGGACCTATTAAAAGAGTTCCCACAGCCCAAA AATCTTCTCAACAGTGTGATTGGAAGAGCCCTCGGCATCTCACATGCAAAAGACAAACTAGTCTACGTGCACACA AATGGACCGAAGAAAAAGAAAGTCACACTGCACATAAAATGGCCCAAGAGCGTGGAGGTAGAAGGCTATGGCAGC AAGAAGATCGATGCTGAGCGGCAGGCTGCAGCTGCAGCTGTTCAAGGGTTGGGGTCTGCTAGGTCCC CGGAATGAGTTGTTTGACGCAGCCAAATACCGAGTGCTAGCTGATCGCTTTGGCTCCCCTGCCGACAGCTGGTGG CGTCCGGAACCCACCATGCCCCCTACTTCCTGGCGGCAGCTGAATCCAGAGAGTATTCGACCAGGGGGACCTGGG ACCGACTTCTTGTCCATGACCCAGCAGGATTCCCACGCTCCACTCAGGGACTCAAGGGGGAGTTCCTTTGAGATG ACAGATGACGACAGTGCCATTAGGGCTCTGACCCAGTTTCCACTTCCCAAGAACCTTCTGGCCAAGGTGATTCAG ATTGCAACGTCATCCTCCACAGCTAAGAACCTCATGCAGTTCCATACTGTGGGCACCAAGACCAAGCTGTCTACA CTCACCCTGCTCTGGCCCTGCCCCATGACCTTTGTTGCCAAAGGGCGCCGCAAAGCAGAGGCTGAGAATAAGGCG GCAGCCTTGGCCTGCAAGAAACTGAAGAGCCTGGGCCTGGTGGACAGGAACAACGAACCGCTTACACACGGTTAC $\tt GGAGCCGATGGC\underline{\textbf{TGA}}CGTATTTCATGGCAGTCAAGTCCAATGGCAGCGTCTTCGTCCGGGACTCCTCTCAGGTGC$ ACCCGCTAGCTGTGCTGCTGACCGACGGGGACGTGCACATCCGTGATGACGGGCGCCGGGCCACCATCTCAC TGAGCGACAGTGACCTGCTGCGGCTGGAGGGTGACTCGCGTACCGTGCGGCTGCTGAAGGAGCTGCGGCGGGCCC TGGGCCGCATGGTGGAGCGGAGCTGCGCAGCGAGCTGCACTTCCCCCCAGCGTACAGGAGGAGCACGGGC AGCTGCTTGCGCTACTGGCAGAGCTGCTGCGAGGACCCTGTGGCAGCTTTGATGTGCGCAAGACAGCTGACGACT

PCT/US2003/028547

FIGURE 1126

MAAARRLMALAAGISPRLQPLGPRAAGRQGRSRGFSSSCAHPDHTKEAAEAESGMAPGGPGEGDGSLVNASRDLL KEFPQPKNLLNSVIGRALGISHAKDKLVYVHTNGPKKKKVTLHIKWPKSVEVEGYGSKKIDAERQAAAAACQLFK GWGLLGPRNELFDAAKYRVLADRFGSPADSWWRPEPTMPPTSWRQLNPESIRPGGPGGLSRSLGREEEEDEEEEL EEGTIDVTDFLSMTQQDSHAPLRDSRGSSFEMTDDDSAIRALTQFPLPKNLLAKVIQIATSSSTAKNLMQFHTVG TKTKLSTLTLLWPCPMTFVAKGRRKAEAENKAAALACKKLKSLGLVDRNNEPLTHGYGADG

PCT/US2003/028547

1209/6881 FIGURE 1127

CGAAAGGCCGGCCTGGCTGCGACAGCCTGGGTAAGAGGTGTAGGTCGGCTTGGTTTTCTGCTACCCGGAGCTGGG CAAGCGGGTGGGAGACAGCGAAGACAGCGTGAGCCTGGGCCGTTGCCTCGAGGCTCTCGCCCGGCTTCTCTTGC GCGGCAGCCGCGTCCCTGAACCGCGGAGTCGTGTTTGTGTTTGACCCGCGGGCGCCGGTGGCGCGGCCGAGGC CCGTCGTGAAGGCGCTATTTGGCGCTTCAGCCGCCGGGGGACTGTCGCCTGTCACCAACCTGACCGTCACTATGG ACCAGCTGCAGGGTCTGGGCAGTGATTATGAGCAACCACTGGAGGTGAAGAACAACAGTAATCTGCAGAGAATGG GCTCCTCCGAGTCAACAGATTCAGGTTTCTGTCTAGATTCTCCTGGGCCATTGGACAGTAAAGAAAACCTTGAAA ATCCTATGAGAAGAATACATTCCCTACCTCAGAAGCTGTTGGGATGTAGTCCAGCTCTGAAGAGGAGCCATTCTG ATTCTCTTGACCATGACATCTTTCAGCTCATCGACCCAGATGAGAACAAGGAAAATGAAGCCTTTGAGTTTAAGA AGCCAGTAAGACCTGTATCTCGTGGCTGCCTGCACTCTCATGGACTCCAGGAGGGTAAAGATCTCTTCACACAGA GGCAGAACTCTGCCCCAGCTCGGATGCTTTCCTCAAATGAAAGAGATAGCAGTGAACCAGGGAATTTCATTCCTC TTTTTACACCCCAGTCACCTGTGACAGCCACTTTGTCTGATGAGGATGATGGCTTCGTGGACCTTCTCGATGGAG AGAATCTGAAGAATGAGGAGGAGACCCCCTCGTGCATGGCAAGCCTCTGGACAGCTCCTCTCGTCATGAGAACTA CAAACCTTGACAACCGATGCAAGCTGTTTGACTCCCCTTCCCTGTGTAGCTCCAGCACTCGGTCAGTGTTGAAGA GACCAGAACGATCTCAAGAGGAGTCTCCACCTGGAAGTACAAAGAGGAGGAAGAGCATGTCTGGGGCCAGCCCCA AAGAGTCAACTAATCCAGAGAAGGCCCATGAGACTCTTCATCAGTCTTTATCCCTGGCATCTTCCCCCAAAGGAA CCATTGAGAACATTTTGGACAATGACCCAAGGGACCTTATAGGAGACTTCTCCAAGGGTTATCTCTTTCATACAG TTGCTGGGAAACATCAGGATTTAAAATACATCTCTCCAGAAATTATGGCATCTGTTTTGAATGGCAAGTTTGCCA TGAACTTGCACATGGAAGAAGAGGTTGAAGACTTCTTATTGAAGAAGCCCATTGTACCTACTGATGGCAAGCGTG GCCTGGGTAATGAATACCCCAAACTCCACTACCCTGAGCTGTATGTCCTGAAGGGGGGATACAAGGAGTTCTTTA TGAAATGCCAGTCTTACTGTGAGCCCCCTAGCTACCGGCCCATGCACCACGAGGACTTTAAAGAAGACCTGAAGA AGTTCCGCACCAAGAGCCGGACCTGGGCAGGGGAGAAGAGCAAGAGGGAGATGTACAGTCGTCTGAAGAAGCTCT GAGGGCGGCAGGACCAGCCAGCAGCCCAAGCTTCCCTCCATCCCCCTTTACCCTCTTTGCTGCAGAGAAACT TCCCAAGGTTGGAGCCCAGGGCATCTTGCTGGCTACGCCTCTTCTGTCCCTGTTAGACGTCCTCCGTCCATATCA GAACTGTGCCACAATGCAGTTCTGAGCACCGTGTCAAGCTGCTCTGAGCCACAGTGGGATGAACCAGCCGGGGCC TTATCGGGCTCCAGCCATCTCATGAGGGGAGAGGAGACGGAGGGGGGGAGTAGAGAAGTTACACAGAAATGCTGCTGG CCAAATAGCAAAGA

PCT/US2003/028547

FIGURE 1128

PCT/US2003/028547

FIGURE 1129

 $\label{thm:liquisykeavlraidginqrssdanlyrldldprptmdgdpdtpk} MKTQRNGHSLGRWSLVLLLLGLVMPLAIIAQVLSYKEAVLRAIDGINQRSSDANLYRLLDLDPRPTMDGDPDTPK\\ PVSFTVKETVCPRTTQQSPEDCDFKKDGLVKRCMGTVTLNQARGSFDISCDKDNKRFALLGDFFRKSKEKIGKEF\\ KRIVQRIKDFLRNLVPRTES$

PCT/US2003/028547

1212/6881 FIGURE 1130

ATTCTGCCTGGCCCTGGGAAGAGACCTAGATATCTGGTTCCAGTGGCAGATGGGGCACTGGCCAGAGGGGTTA GGAGGATTTGGACTCTCCTTGGGAGTCGCTGTGATACGGCCTTCAATTATAGTTGTCTTTCCTTCTTGGATTTCC ACCACTTCCCTGAAACCACGAGCTGGAAGCTGAGACCAGCTGGTCACTGCTGGGCCTGCTAGGAGCCCACACGGA ATTTTCAAATGTTGAACCAGCTTTGCAGAACTATAATAAACCCAAGTGTGATACCCTGTCTCAAGTATTGTGGTG ATCAAATAGGACCAGTGACTTTCGAGGATGTGGCTGTGCTTTTCACTGAGGCAGAGTGGAAGAGACTGAGCCTTG AGCAGAGGAACCTATACAAAGAAGTGATGCTGGAAAATCTCAGGAATCTGGTCTCATTGGAATCAAAGCCAGAAG TCCATACCTGCCCTTCTTGCCCTCTGGCCTTTGGCAGTCAGCAGTTCCTCAGCCAAGATGAGCTACACAATCATC CTATTCCAGGTTTCCATGCAGGAAATCAACTCCACCCAGGAAATCCCTGCCCAGAGGATCAGCCACAGTCACAAC ATCCTTCTGATAAAAATCACAGGGGGGCTGAAGCAGAAGATCAACGAGTGGAAGGAGGCGTCAGACCCTTGTTTT GGAGTACAAATGAAAGGGGGGCTTTAGTGGGTTTCTCTAGCCTGTTCCAGAGACCACCAATAAGCTCTTGGGGAG GCAACAGAATATTAGAGATACAGCTCAGTCCAGCCCAGAATGCAAGCTCTGAGGAAGTAGACAGAATTTCCAAGA GGGCAGAAACCCCAGGGTTTGGAGCAGTCACGTTTGGGGAGTGTGCACTAGCTTTTAACCAGAAGTCAAACCTGT TCAGACAGAAGGCAGTCACAGCAGAAAAATCTTCAGACAAAAGGCAGTCACAGGTGTGCAGGGAGTGTGGGCGAG GCTTTAGCAGGAAGTCACAGCTCATCATACACCAGAGGACACACAGGAGAAAAGCCTTATGTCTGCGGAGAGT GTGGGCGAGGCTTTATAGTTGAGTCAGTCCTCCGCAACCACCTGAGTACACACTCCGGGGAGAAACCTTATGTGT CGTTTATGTGCACAGTGTGTGGGCGAGGCTTTCGTGAAAAGTCAGAGCTCATTAAGCACCAGAGGTGTCAAGTGA CACTCTCCTGCTTTATTTTTTTCTACATCTCTAGCCTTTGCTGTTTCCTCTCCTACCCCACCTTTAGATTTTACT CAGAGTTCAGTCTCCAGCCCTACAATCTGAGGGACACCTTTACCAGGTCCCCTTCCTAACCCTCCAGTCCCAAAT CCAAGATTCTTTAACCACACTCTAAAAGTTCTTCAGACTCAGGACTTAAACATAGCCACGCCACCTTGGCCTTCA ATGACAGGGATCTAGCAATGCTGCATCATCAGCCTTCCAATACCAGGTTTAAGGGTATTTTAAACACAGCTCCTC TTAAATCCTCCAATCTCAGTACCCAGTGTTTTAGCCATGCTCGGGTGGCTAAATTACATCCAGGAATGGTGCCAG GGCCTTTAGCCATTTGTCTCTCCTCACACTCCAGGGCCCATATGGCCCAGGTTCTGACAGTTTGCCTTACTCCCT TGGGCTGGGGCTAGCCCTACCTGATACCCTGTGTCAATGAGTGTACCTTGGAGAGCTATCCACTCAGGCCCCAGT GCCTCTATTTGCTAAGGGACTCTGCCACAGAAAAGAAGGGGGAGAGATGTTCATGTAACCTCAAAATACTTAGGCT CCTCTCACTGGAAGTGGTTGATCTCCAGGGAATCCCCAAGGTTAGCCTGCTTAGGGGGAAGGGCTAGGGGTACCTG GAATGTAGGATCTCCCCCATGCCTGGCCTACCACCCTAATGTGTCTGGAATTGGTGGGTTCTTGGTCTTGCTGAC TTCAAGAATGAAGCCGTGGACCCTCACGGTGAGTGTTACAATTCTTAAA

PCT/US2003/028547

FIGURE 1131

CAGCGTGCCTGCCAGTGTAGAGCCGGTGGAGCAGCTGGGCTCGGCGTGAGGTTTCGCCCTGGCTACAACGACCC CTTCACCTGCTCCTGCTGCCTTTACAAGACGTGCCGCCGACCACGTCCCTCCAAGTGTGCCGCCCAGCTACC CTGGACCAAGCTACCAGGGCTACCACCATGCCGCCTCAGCCAGGGATGCCAGCAGCACCCTACCCAATGCAGT CCTACCCCGCCAGCCAGCCTCCTTACAACCCGGCCTACATGGATGCCCCGAAGGCGGCCCTCTGAGCATTCCCTG GCCTCTCTGGCTGCCACTTGGTTATGTTGTGTGTGTGCGTGAGTGGTGCAGGCGCGGTTCCTTACGCCCCATG CTCTGATGCTGACAAGGTGGGAACAATCCTTGCCAGAGTGGGCTGGGACCAGACTTTGTTCTCTCACCTG AAATTATGCTTCCTAAAATCTCAAGCCAAACTCAAAGAATGGGGTGGTGGGGGGGCACCCTGTGAGGTGGCCCCTG AGAGGTGGGGGCCTCTCCAGGCACATCTGGAGTTCTTCTCCAGCTTACCCTAGGGTGACCAAGTAGGGCCTGTC ACACCAGGGTGGCGCAGCTTTCTGTGTGATGCAGATGTGTCCTGGTTTCGGCAGCGTAGCCAGCTGCTTGAG GCCATGGCTCGTCCCCGGAGTTGGGGGTACCCGTTGCAGAGCCAGGGACATGATGCAGGCGAAGCTTGGGATCTG GCCAAGTTGGACTTTGATCCTTTGGGCAGATGTCCCATTGCTCCCTGGAGCCTGTCATGCCTGTTGGGGATCAGG CAGCCTCCTGATGCCAGAACACCTCAGGCAGAGCCCTACTCAGCTGTACCTGTCTGCCTGGAETGTCCCCTGTCC TTTCATTTTATTTTAGCCAAACATTTTGCCTGTTTTCTGTTTCAAACATGATAGTTGATATGAGACTGAAACCCC TGGGTTGTGGAGGGAAATTGGCTCAGAGATGGACAACCTGGCAACTGTGAGTCCCTGCTTCCCGACACCAGCCTC $\tt ATGGAATATGCAACAACTCCTGTACCCCAGTCCACGGTGTTCTGGCAGGACACCTGGGCCAATGGGCCATC$ TGGACCAAAGGTGGGGTGTGGGGCCCTGGATGGCAGCTCTGGCCCAGACATGAATACCTCGTGTTCCTCCCT CTATTACTGTTTCACCAGAGCTGTCTTAGCTCAAATCTGTTGTGTTTCTGAGTCTAGGGTCTGTACACTTGTTTA TAATAAATGCAATCGTTTGG

PCT/US2003/028547

1214/6881 FIGURE 1132A

AGCGAACCATCGGGGCGGCGGGGGCCATGTTGGAGCGGCGGGAGCCGCAGCAGCGTCGGGGATGCTGTGGTGG GGGCGGAAAAAGCCAGGGCCGCACGCCGGAGGGGCTCCGGCCGCGGAGTAGATGGTGCCCAGAGGGCGGGGGG CGTGGCGGGGCCTCGGGGAACGGTCGACCCCCATACTCCTGCTCCTTCTCTCTTTTTTTCCCCCTCAGCCAGG AGGAGCTGGGGGGGGGGCACCAGGCTGGGACCCAGGCTTAGCTGCCACTACGGGGCCAAGGGCGCATATCG GTGGCGGAGCCTTAGCTCTTTGTCCGGAGTCTTCCGGGGTCCGGGAGGATGGGGGGCCTGGCCTGGGGGTCAGGG AGCCTATCTTCGTGGGGCTCCGAGGGAGAAGGCAAAGCGCCCGGAATAGTCGAGGGCCCCCTGAGCAGCCGAATG AGGAGCTGGGGATTGAACACGCCGTCCAGCCATTGGGCAGCCGCGAACGAGACAGGACAGGGACCAGGGTCTG TGTTATACTGGCGCCCAGAGGTCTCCTCTTGCGGGCGGACAGGACCTTTGCAAAGAGGTAGTCTGTCACCAGGGG CCAAGCCGGTGTCCTCCCAGCGGAACGCTGGGACAGGCTCCCGCAAAAGAGTGGGCACCGCGCGCTGCTGTGGGG AATTATGGGCAACAGGGGCAAGGGTCAGGGCGAGAGAGCCACGACATCCGGAGCAGAAAGGACAGCCCCCCGGC CATCAGGTTCAGCACCCCGCGAGTCTCGGACAGCTCCCGAGCCGGCGCCCAAGCGCATGCGCTCCCGGGGTCTCT TCCGCTGCCGCTTCCTCCCGCAGCGCCCCGGGCCGCTCCCCGGGACTCCCGGCCCGTCCTGAAGCCAGGAAAG TAACCTCGGCGAACCGGGCACGCTTTCGTCGCGCCGCAAACCGCCACCCGCAGTTTCCGCAGTACAACTACCAGA CGCTGGTGCCGGAGAATGAGGCAGCAGCACCGCGGTGCTACGCGTGGTTGCTCAGGACCCGGACGCCGGCGAGG GCGGCCTTATCCGTACGGCGGCAGCTCTGGACCGCGAGAGCATGGAGCGTCACTACCTGCGTGTGACCGCGCAGG ACCACGGGTCGCCGCCTCTCGGCCACCACGATGGTGGCCGTGACAGTAGCCGACCGCAACGACCACTCGCCGG TTTTTGAGCAAGCGCAGTACCGGGAGACCCTTCGCGAGAATGTGGAGGAGGGCTACCCTATCCTGCAGCTGCGTG CTGCCGCCGCCTTCGAGATTGATCCACGCTCCGGCCTCATCAGCACCAGCGGCCGAGTGGACCGCGAGCACATGG AAAGCTATGAGCTGGTGGTAGAGCCAGCGACCAGGGCCAGGAACCCGGGCCGCGCTCGGCCACTGTGCGCGTAC ACATAACTGTGCTAGACGAGAACGACAATGCTCCTCAGTTCAGCGAGAAGCGCTACGTGGCGCAGGTGCGCGAGG ATGTGCGCCCCACACAGTCGTGCTGCGCGTCACGGCCACTGACCGGGACAAGGACGCCAACGGATTGGTGCACT ACAACATCATCAGTGGCAATAGCCGTGGACACTTTGCCATCGACAGCCTCACTGGCGAGATCCAGGTGGTGGCAC ACAACACGGGCCTGGCCAGCATCCAGGTGGTGGACATCAATGACCACATTCCTATTTTTGTCAGCACGCCCTTCC AAGTTTCTGTCTTGGAAAATGCTCCCTTGGGTCACTCAGTCATCCACATTCAGGCAGTCGATGCAGACCATGGGG AGAATGCCAGATTGGAGTACTCCCTAACTGGTGTGGCACCTGATACTCCTTTTGTGATAAACAGCGCCACTGGCT GGGTCTCTGTGAGTGGTCCCCTGGACCGTGAGTCTGTGGAGCATTACTTCTTTGGTGTGGAGGCTCGAGACCATG GCTCACCCCCACTCTCTGCCTCAGCCAGTGTCACCGTGACTGTGCTGGACGTTAATGACAATCGGCCTGAGTTCA CAATGAAGGAGTACCACCTACGACTGAATGAGGATGCAGCTGTGGGCACCAGTGTGGTCAGCGTGACCGCAGTAG ACCGTGATGCCAACAGTGCCATCAGCTACCAGATCACAGGCGGCAACACCCGGAATCGCTTTGCCATCAGCACCC AGGGGGGTGTGGGTCTGGCTCTGCCACTGGACTACAAGCAGGAACGCTACTTCAAGCTGGTACTAA CTGCATCTGACCGTGCCCTTCATGATCACTGCTATGTGCACATCAACATCACAGATGCCAACACTCATCGGCCGG TCTTTCAAAGTGCCCACTACTCAGTGAGTGTGAATGAAGATCGGCCAATGGGTAGCACCATAGTGGTCATCAGTG CCTCTGATGATGACGTGGGTGAGAATGCTCGTATCACCTATCTCCTGGAGGACAACCTGCCCCAGTTCCGCATTG ATGCAGACTCAGGAGCCATTACATTACAGGCCCCATTAGACTATGAGGACCAGGTGACCTACACCCTGGCTATCA CAGCTCGGGACAATGGCATCCCACAGAAGGCAGACACTACTTATGTGGAGGTGATGGTCAATGACGTGAATGACA ATGCTCCACAATTTGTGGCCTCCCACTATACAGGGCTGGTCTCTGAGGATGCCCCACCTTTCACCAGTGTCCTGC AGATCTCAGCCACTGACCGGGATGCTCATGCCAATGGCCGGGTCCAGTACACTTTCCAGAATGGTGAAGATGGGG ATGGAGATTTTACCATTGAGCCCACCTCTGGAATTGTCCGTACAGTAAGGCGGCTAGACCGGGAGGCAGTATCAG TGCAGGATGTGAACGACAATGCACCTGTCTTCCCAGCTGAGGAGTTTGAGGTGCGGGTGAAAGAGAATAGCATTG TGGGCTCAGTGGTGGCCCAGATCACTGCAGTGGACCCTGACGAAGGCCCCAATGCCCATATAATGTACCAGATCG

PCT/US2003/028547

FIGURE 1132B

TGGAGGGGAACATCCCTGAGCTGTTCCAAATGGACATCTTCTCTGGAGAACTGACGGCACTCATTGACCTAGACT ATGAGGCTCGCCAAGAATATGTGATTGTGGTGCAGGCCACATCTGCTCCTTTGGTCAGCCGGGCCACTGTGCACG TCCGCCTGGTTGACCAGAATGACAACAGCCCTGTGCTCAACAACTTCCAGATCCTCTTCAACAACTATGTATCCA ACCGTTCAGACACCTTCCCGTCGGGCATTATTGGGCGCATCCCAGCTTATGACCCCGATGTCTCCGACCACCTCT TCTACTCCTTTGAGCGTGCAATGAGCTGCAGCTGCTGGTAGTCAACCAGACCAGTGGGGAGCTGCGACTCAGCC GAAAGCTAGACAATAACCGCCCACTGGTGGCCTCCATGTTGGTGACTGTCACAGATGGCCTGCACAGCGTGACGG CGCAGTGTGTGCTGCGCGTGGTCATCACGGAGGAGTTGCTGGCCAACAGCCTGACCGTGCGCCTTGAGAACA TGTGGCAGGAGCGCTTCCTGTCACCGCTGCTGGGCCGCTTCCTCGAGGGCGTGGCTGCGGTGCTCGCTACGCCCG CTGAGGACGTCTTCATCTTCAACATCCAGAACGACACAGACGTAGGGGGCACCGTGCTCAATGTGAGTTTCTCGG CGCTAGCTCCACGTGGGGCCGGGGCGCGCTGCAGGGCCCTGGTTCAGCTCCGAGGAGCTGCAGGAGCAGTTGT ACGTGCGCCGGGCGCGCTGGCGGCTCCCTGCTCGACGTACTGCCCTTCGACGACAACGTGTGCCTGCGAG AGCCCTGTGAGAACTACATGAAATGCGTGTCCGTGCTCCGCTTTGACTCGTCCGCGCCCTTCCTGGCCTCGGCCT CCACGCTGTTCCGACCCATCCAGCCCATCGCTGGCCTGCCGCTGCCCGGCCCGGATTCACGGGAGACTTTT GCGTCTGCCGCAACGGGGGCACCTGCACCGACGCGCCCAACGGCGGCTTTCGCTGCCAGTGCCCGGCAGGCGCG CCTTCGAGGGCCCGCGCTGCGAGGTGGCTGCGCGCCCTCCTTCCCGCCCAGTTCGTCATGTTTCGCGGCCTGC GGCAGCGATTCCACCTTACGCTGTCCCTCTCGTTCGCGACAGTGCAGCAGAGCGGGCTGCTCTTCTACAACGGGC AATCCAACACCGTGGTCAGCCCCACAGTTCCAGGGGGCTTGAGTGACGGGCAATGGCATACAGTGCATCTGAGAT ACTACAACAAGCCCCGGACAGATGCCCTAGGGGGTGCACAGGGCCCCTCCAAGGACAAGGTGGCTGTGCTAAGCG TGGATGATTGTGATGTGGCCGTGGCTCTGCAGTTTGGTGCTGAGATTGGCAACTACTCATGCGCGGCTGCTGGTG TGCAAACAAGCTCCAAGAAGTCCCTGGACCTGACGGGCCCTCTTCTTCTGGGAGGTGTCCCCAACCTCCCCGAGA ACTTCCCCGTATCCCATAAGGACTTCATCGGCTGTATGCGGGACCTGCACATTGATGGCCGCCGAGTGGACATGG CGGCTTTTGTCGCAAATAATGGCACCATGGCAGGCTGCCAAGCCAAGCTACACTTTTGTGACTCAGGCCCCTGCA AGAACAGTGGCTTCTGCTCGGAGCGCTGGGGCAGCTTCAGCTGCGACTGCCCTGTGGGCTTCGGCGGCAAAGACT GTCAGCTTACTATGGCCCATCCCCACCATTTCCGTGGCAACGGCACACTGAGCTGGAACTTTGGAAGTGACATGG CTGTGTCTGTGCCATGGTACCTGGGGCTGGCATTTCGGACACGGGGCAACGCAGGGGGTCCTGATGCAAGTGCAGG GTGCTTCCCATCTCCTTCTGGACCAGGTGACTGTCAGTGATGGCCGGTGGCACGATCTGCGGCTGGAGTTGCAGG AGGAACCAGGTGGCCGGCGGGCCACCATGTCCTTATGGTCTCACTGGACTTTAGCCTCTTCCAGGACACCATGG CGGTGGGGAGTGAGCTGCAGGGCCTGAAGGTAAAGCAGCTCCACGTGGGAGGCCTGCCCCCGGCAGTGCAGAGG AGGCTCCTCAGGGTCTGGCTTGGCTGCATCCAGGGGGTGTGGCTCGGCTCCACACCCTCTGGCTCCCCGGCCCTGC TACCCCCAGCCACCGAGTGAATGCGGAGCCTGGCTGTTGTTGTGACCAACGCCTGTGCCTCTGGGCCCTGCCCAC TGGATGCCTGCCTCCTGAACCCCTGTCAGAACCAGGGATCATGCCGGCACCTGCCAGGAGCCCCCCATGGCTATA CCTGTGACTGTGGGTGGCTATTTCGGGCACĆACTGTGAGCACAGGATGGACCAGCAGTGCCCACGGGGCTGGT GGGGGAGCCCAACCTGTGGCCCCTGCAACTGTGATGTTCACAAAGGTTTTGATCCCAACTGCAACAAGACAAATG GGCAGTGTCACTGCAAGGAGTTCCACTACCGACCGCGGGGCAGTGACTCTTGCCTCCCATGTGACTGCTACCCTG TGGGCTCCACCTCGCGCTCATGTGCACCCCACAGCGGGCAGTGCCCCTGTCGCCCAGGAGCCCTTGGCCGCCAGT CCCTGAGATCTGGTGTGTGGCCCCAGACAAAGTTTGGCGTCCTGGCCACAGTGCCCTGTCCCCGGGGGGCCC TGGGTGCTGCTGTGCGGCTGTGTGATGAGGCCCAGGGTTGGCTGGAGCCCGACCTCTTCAACTGTACCTCCCCTG CCTTTCGAGAGCTCAGTCTGCTGCTGGATGGCCTAGAGCTGAACAAGACGGCACTGGATACCATGGAGGCCAAGA AGCTGGCTCAGCGGCTACGGGAGGTGACTGGCCACACTGACCACTATTTTAGCCAAGATGTTCGAGTCACTGCCC GCCTGCTGGCCCACCTGCTGGCCTTCGAGAGCCATCAGCAGGGCTTCGGGCTGACAGCCACACAGGATGCCCACT TCAATGAGAATCTGCTGTGGGCCGGCTCTGCACTGCTTGCCCCAGAGACAGGGGACTTGTGGGCGGCGCTGGGGC AGCGGGCCCCTGGGGGGCTCCCCAGGCAGCGGGGACTGGTGAGGCACCTGGAGGAGTATGCAGCCACACTCGCAA

WO 2004/030615 PCT/US2003/028547

FIGURE 1132C

GGAATATGGAACTCACATACCTGAATCCCATGGGGCTGGTGACGCCTAATATCATGCTCAGCATTGACCGCATGG AGCACCCCAGTTCTCCCCGGGGGGCCCGTCGCTACCCTCGCTACCATAGCAACCTCTTTCGAGGCCAGGATGCCT GGGATCCTCACACCCATGTGCTGCCTTCCCAGTCCCCACGGCCATCCCCATCTGAAGTTCTGCCCACAAGCA GCAGCATAGAAAACTCCACCACCTCAAGTGTGGTCCCCCCACCAGCCCGCCAGAGCCAGAGCCTGGGATCTCCA TTATCATTCTCCTCGTTTACCGCACCTTAGGGGGACTGCTCCCTGCCCAGTTCCAGGCAGAACGCCGAGGTGCCA GGCTTCCTCAGAACCCCGTCATGAACTCCCCGGTGGTCAGCGTGGCTGTGTTCCACGGACGCAACTTCCTAAGGG AGTGGGACCCACCTGGCCTGGCGGAGCAGCATGGTGTGTGGACAGCACGGGACTGCGAGCTGGTGCACAGGAATG GGTCCCACGCACGGTGTCGCTGCAGCCGGACAGGGACCTTTGGGGTCCTCATGGATGCCTCTCCCCGTGAGAGGC TGGAGGGCGACCTGGAGCTGCTGGTGTTCACCCACGTGGTCGTGGCTGTGTCTGTGGCTGCGCTGGTGCTGA CTGCAGCCATCCTGCTGAGCCTGCGCAGCCTCAAGTCCAATGTGCGTGGGATCCATGCCAATGTGGCAGCCGCCC TGGGGGTGGCAGAGCTCCTCTTCCTGCTGGGGATTCACAGGACCCACAATCAGCTGGTGTGCACTGCAGTCGCCA TCCTCCTGCACTACTTCTTCCTCAGCACCTTCGCGTGGCTCTTCGTGCAGGGGGCTGCACCTCTACCGCATGCAGG TTGAGCCACGCAACGTGGACCGCGGCGCCATGCGCTTCTACCATGCCCTGGGCTGGGGCGTCCCTGCTGTGCTGC TGGGCCTTGCTGTGGGCCTGGACCCTGAGGGCTATGGGAACCCTGACTTCTGCTGGATCTCAGTCCACGAGCCCC TCATCTGGAGCTTTGCTGGCCCTGTTGTCCTGGTCATAGTGATGAACGGGACCATGTTTCTCCTCGCTGCCCGCA TGCTGGTCAGTGCCTCCTGGCTCTTTGGGCTCCTGGCAGTCAACCACAGCATCCTAGCCTTCCACTACCTCCATG CTGGACTCTGCGGCCTCCAGGGCCTGGCGGTGCTGCTCTTCTGTGTCCTAAATGCAGATGCTCGGGCTGCCT GGATGCCAGCCTGTCTGGGCAGGAAGGCAGCGCCTGAGGAGGCAAGGCCAGCACCTGGGCTGGGACCTGGGGCCT ACAACAACACGGCTCTCTTTGAGGAGAGTGGCCTCATCCGCATCACTCTGGGCGCCTCCACCGTCTCCTGTGA TTCGACATGGCTCAGCCGCTGACCACACTGACCACAGCCTCCAGGCTCATGCTGGCCCCACTGACCTGGACGTGG CCATGTTCCATCGAGATGCTGGCGCAGACTCCGACTCTGACAGTGACCTGTCCTTGGAGGAGGAGAGGAGTCTCT CCATTCCATCTTCAGAAAGCGAGGACAATGGCCGGACGCGGGGGGGCGCTTCCAACGGCCACTCTGCCGAGCAGCCC AGAGTGAGAGGCTCCTCACCCCACCCCAAAGATGTGGATGGCAATGACCTCCTGTCCTACTGGCCAGCCCTGGGGG AGTGCGAGGCAGCCCCTGTGCTCTGCAGACTTGGGGCTCTGAAAGGCGCCTGGGGCTGGACACCAGCAAGGATG CAGCTAACAACCAGCCAGACCCGGCCCTGACCAGTGGGGATGAGACTTCTCTGGGCCGGGCCCAGCGCCAGA GGAAAGGCATCCTGAAGAACCGGTTGCAATACCCACTGGTGCCACAGACCCGAGGTGCCCCTGAGCTGTCCTGGT GCCGTGCAGCCACCTTGGGCCACCGTGCAGTGCCAGCTGCCTCTTACGGTCGCATCTATGCTGGCGGGGGCACGG GCAGCCTTTCACAGCCAGCCAGCCGCTACTCTTCTAGAGAACAGCTGGACCTGCTCCTCCGGCGGCAACTGAGCC GTGAGCGACTAGAGGAAGCCCCTGCCCCTGTTCTACGTCCCCTGAGCCGGCCAGGGTCCCAGGAATGCATGGATG CTGCACCAGGCCGACTGGAGCCCAAAGATCGGGGCAGCACCCTGCCACGGAGGCAGCCACCTCGGGACTACCCTG GCGCCATGGCTGGCCGCTTCGGGTCACGGGATGCGCTCGACTTAGGGGCACCTCGAGAGTGGTTGAGCACGCTGC CTCCGCCCGCCCCCCGGGACCTTGACCCACAGCCCCCACCTCTGCCCCTGTCTCCCCAGCGGCAACTCTCAA GGGACCCCCTCTTGCCATCCCGGCCGCTGGACTCTCTGTCTAGGAGCTCGAACTCTCGGGAGCAGCTGGACCAGG TGCCTAGCCGGCACCCCTCACGAGAAGCCCTTGGGCCACTCCCGCAGCTGCTCAGAGCTAGGGAGGACTCGGTCA GTGGCCCCAGCCATGGCCCCTCCACAGAACAGTTGGACATTCTTTCCTCCATCCTTGCCTCTTTCAACTCCTCGG CCCTCTCCTCTGTGCAATCTTCAAGCACACCCTTGGGCCCTCACACCACTGCCACACCTTCTGCCACAGCCTCTG TGCTTGGGCCCTCCACGCCACGTTCTGCCACGTCTCACAGCATCTCGGAGCTGTCGCCAGACTCAGAAGTTCCCA ${\tt GAAGTGAGGGTCACTCC} \underline{{\tt TGA}}{\tt GGGGGATGACGGCGTGGACGAGGAACAGCTGAGGGCGACAGAGGATCTAGGCTAACCCCC}$ TGGTGTGGCAGGGCTGAGGCTCCATGTGCATCTGTGAGCATGCGTGTGACAGGTGCAGAGACGGGGGACTGGAGG GAGACTTTTATACGTTTTGTACCTTTGTAACCAGAGAGATGCTTATGTTATTTTTCAGCTTTTCTGTCTCCTGGG GGGTTTGAGGCTGGGCTGGGAGGGGAGGGAGATAGAGGGAGAGATGCAGTTTGACCCCATTTGGGTCCTGAGCA CACCCCAAGTTGATCTGAGTATCGTCAGGGGCCCAAAGTACAGAATTGTTCTTTGCTTTTATTGAATGCTCCA AAGGCCAAACTTCTGGGGGCTGGGGGTTGGTCTTGGAAACAGGGGTCCTCTGACTTCCTCATGGGGGGCTTGCTCAT

PCT/US2003/028547

FIGURE 1132D

ACCGCCCCTCCTGGTGGATGTGTGTTTATTATGTGGAGTCCCTGCCACTTACTGCCTTATGACCTAGGACTGA TGCTGTGGGGTGCTGGTGGAGCAGCTGATGTCGTGTTTACAGAGCAAGGCTTCCCTGTCTCCCACGGGGAGGGGC TGTCTGTGGTGCCATTTGATTCCCTGACACTGCCCCCTGCTTGAATTGATTCCGAAGGGTAGGGTGGGAAGGTGA GCAAAGGGAGCAGAAACAAGGGAATTCAAGACCCAGAATGTAGGTGCCACTGCCTCCTATGTTTACAGGATCCTC CGTGGCCCTAGGCACCTGGGCTGCAGGAAGTGACTCCGTTCCACTCCTCTTATTCCCTTAAAAAAGGGAAAAAT GACTGTTACGACCCTGTTCACAAAACTCTTACTTTTGCTATTTTGTCTGCTGTCCAGAACTGAAGACTTTAAAAT TTTGTTACTGTTTACAAGTCCAGATTCAAAAATGTTTTTACTTTGTTTACAACTCAAAACTTTGAGTTTTACAC TTTGTTTACAGTAGATAATTTTTTTCCTTTGTTTCCAAGTGAAAGGTAGGGAAAGTGGGAGAGGGACTTGGAGG ACCCACCTGTGAGGACCCTGACCTGGCCATCTTGAGGGGTTTTCTAACCCCCAGGTCTCCCAGGCCGAAGGTCAG CCTTGAGTCCCGTTTAACAGCAGATCCAGAAGACCTTGAGAGTAGGCGTCCTCTAACCACGGGGAGAGTGGCTG TGGGAGATTAGAAATTCTACTTCCCTGACTGGAGCTAAATCCCACCAGGCCAGGACCCAAACTCTCCTTACCGAGA AGGACCCCAGCTCTTGAAGGGCTGAGTGGCCTGCTGGGGGTGGGAGGGTGTCTTTACTATGTCCTAGGTTTCGTA CGCGCTCTGTTTTGGGAATAAACTTCTATAGAAAACAAAA

PCT/US2003/028547

1218/6881 FIGURE 1133

MMARRPPWRGLGERSTPILLLLLLSLFPLSQEELGGGGHQGWDPGLAATTGPRAHIGGGALALCPESSGVREDGG PGLGVREPIFVGLRGRRQSARNSRGPPEQPNEELGIEHGVQPLGSRERETGQGPGSVLYWRPEVSSCGRTGPLQR GSLSPGALSSGVPGSGNSSPLPSDFLIRHHGPKPVSSQRNAGTGSRKRVGTARCCGELWATGSKGQGERATTSGA ERTAPRRNCLPGASGSGPELDSAPRTARTAPASGSAPRESRTAPEPAPKRMRSRGLFRCRFLPQRPGPRPPGLPA RPEARKVTSANRARFRRAANRHPQFPQYNYQTLVPENEAAGTAVLRVVAQDPDAGEAGRLVYSLAALMNSRSLEL FSIDPQSGLIRTAAALDRESMERHYLRVTAQDHGSPRLSATTMVAVTVADRNDHSPVFEQAQYRETLRENVEEGY PILQLRATDGDAPPNANLRYRFVGPPAARAAAAAFEIDPRSGLISTSGRVDREHMESYELVVEASDQGQEPGPR SATVRVHITVLDENDNAPQFSEKRYVAQVREDVRPHTVVLRVTATDRDKDANGLVHYNIISGNSRGHFAIDSLTG EIQVVAPLDFEAEREYALRIRAQDAGRPPLSNNTGLASIQVVDINDHIPIFVSTPFQVSVLENAPLGHSVIHIQA VDADHGENARLEYSLTGVAPDTPFVINSATGWVSVSGPLDRESVEHYFFGVEARDHGSPPLSASASVTVTVLDVN DNRPEFTMKEYHLRLNEDAAVGTSVVSVTAVDRDANSAISYQITGGNTRNRFAISTQGGVGLVTLALPLDYKQER YFKLVLTASDRALHDHCYVHINITDANTHRPVFQSAHYSVSVNEDRPMGSTIVVISASDDDVGENARITYLLEDN LPQFRIDADSGAITLQAPLDYEDQVTYTLAITARDNGIPQKADTTYVEVMVNDVNDNAPQFVASHYTGLVSEDAP ${\tt PFTSVLQISATDRDAHANGRVQYTFQNGEDGDGDFTIEPTSGIVRTVRRLDREAVSVYELTAYAVDRGVPPLRTP}$ VSIQVMVQDVNDNAPVFPAEEFEVRVKENSIVGSVVAQITAVDPDEGPNAHIMYQIVEGNIPELFQMDIFSGELT ${ t ALIDLDYEARQEYVIVVQATSAPLVSRATVHVRLVDQNDNSPVLNNFQILFNNYVSNRSDTFPSGIIGRIPAYDP}$ DVSDHLFYSFERGNELQLLVVNQTSGELRLSRKLDNNRPLVASMLVTVTDGLHSVTAQCVLRVVIITEELLANSL TVRLENMWQERFLSPLLGRFLEGVAAVLATPAEDVFIFNIQNDTDVGGTVLNVSFSALAPRGAGAGAAGPWFSSE ELQEQLYVRRAALAARSLLDVLPFDDNVCLREPCENYMKCVSVLRFDSSAPFLASASTLFRPIQPIAGLRCRCPP GFTGDFCETELDLCYSNPCRNGGACARREGGYTCVCRPRFTGEDCELDTEAGRCVPGVCRNGGTCTDAPNGGFRC QCPAGGAFEGPRCEVAARSFPPSSFVMFRGLRQRFHLTLSLSFATVQQSGLLFYNGRLNEKHDFLALELVAGQVR LTYSTGESNTVVSPTVPGGLSDGQWHTVHLRYYNKPRTDALGGAQGPSKDKVAVLSVDDCDVAVALQFGAEIGNY ${\tt SCAAAGVQTSSKKSLDLTGPLLLGGVPNLPENFPVSHKDFIGCMRDLHIDGRRVDMAAFVANNGTMAGCQAKLHF}$ CDSGPCKNSGFCSE'RWGSFSCDCPVGFGGKDCQLTMAHPHHFRGNGTLSWNFGSDMAVSVPWYLGLAFRTRATQG VLMQVQAGPHSTLLCQLDRGLLSVTVTRGSGRASHLLLDQVTVSDGRWHDLRLELQEEPGGRRGHHVLMVSLDFS LFQDTMAVGSELQGLKVKQLHVGGLPPGSAEEAPQGLVGCIQGVWLGSTPSGSPALLPPSHRVNAEPGCVVTNAC ASGPCPPHADCRDLWQTFSCTCQPGYYGPGCVDACLLNPCQNQGSCRHLPGAPHGYTCDCVGGYFGHHCEHRMDQ QCPRGWWGSPTCGPCNCDVHKGFDPNCNKTNGQCHCKEFHYRPRGSDSCLPCDCYPVGSTSRSCAPHSGQCPCRP GALGRQCNSCDSPFAEVTASGCRVLYDACPKSLRSGVWWPQTKFGVLATVPCPRGALGAAVRLCDEAQGWLEPDL FNCTSPAFRELSLLLDGLELNKTALDTMEAKKLAQRLREVTGHTDHYFSQDVRVTARLLAHLLAFESHQQGFGLT ATQDAHFNENLLWAGSALLAPETGDLWAALGQRAPGGSPGSAGLVRHLEEYAATLARNMELTYLNPMGLVTPNIM LSIDRMEHPSSPRGARRYPRYHSNLFRGQDAWDPHTHVLLPSQSPRPSPSEVLPTSSSIENSTTSSVVPPPAPPE PEPGISIIILLVYRTLGGLLPAQFQAERRGARLPQNPVMNSPVVSVAVFHGRNFLRGILESPISLEFRLLQTANR SKAICVQWDPPGLAEQHGVWTARDCELVHRNGSHARCRCSRTGTFGVLMDASPRERLEGDLELLAVFTHVVVAVS VAALVLTAAILLSLRSLKSNVRGIHANVAAALGVAELLFLLGIHRTHNQLVCTAVAILLHYFFLSTFAWLFVQGL $\verb|HLYRMQVEPRNVDRGAMRFYHALGWGVPAVLLGLAVGLDPEGYGNPDFCWISVHEPLIWSFAGPVVLVIVMNGTM|\\$ FLLAARTSCSTGQREAKKTSALTLRSSFLLLLLVSASWLFGLLAVNHSILAFHYLHAGLCGLQGLAVLLLFCVLN ADARAAWMPACLGRKAAPEEARPAPGLGPGAYNNTALFEESGLIRITLGASTVSSVSSARSGRTQDQDSQRGRSY ${ t LRDNVLVRHGSAADHTDHSLQAHAGPTDLDVAMFHRDAGADSDSDLSLEEERSLSIPSSESEDNGRTRGRFQR$ PLCRAAQSERLLTHPKDVDGNDLLSYWPALGECEAAPCALQTWGSERRLGLDTSKDAANNNQPDPALTSGDETSL GRAQRQRKGILKNRLQYPLVPQTRGAPELSWCRAATLGHRAVPAASYGRIYAGGGTGSLSQPASRYSSREQLDLL ${\tt LRRQLSRERLEEAPAPVLRPLSRPGSQECMDAAPGRLEPKDRGSTLPRRQPPRDYPGAMAGRFGSRDALDLGAPR}$ EWLSTLPPPRRTRDLDPQPPPLPLSPQRQLSRDPLLPSRPLDSLSRSSNSREQLDQVPSRHPSREALGPLPQLLR AREDSVSGPSHGPSTEQLDILSSILASFNSSALSSVQSSSTPLGPHTTATPSATASVLGPSTPRSATSHSISELS **PDSEVPRSEGHS**

PCT/US2003/028547

1219/6881 FIGURE 1134

TACTGACTTCAGCACCAACTTGTGGTCCCAGGTAAGTTTCCACGCTGGTACTTTAGCCCTGGGCTCGAACCTGC GGACACGCTGTGGCTGCAACTCCCCGCCGGCCAGACCTCAGTACGCAGCGCGGGTGGAGAAACATAATGCACT ACTGATGTGCGCAGGGACTGGCGGCAGCGGGTCAGAGCCAGTCAGCCAAAGCCAGGCCAGCACAATAGACTGTC CCGGTTCCCGCCAGGAGGCGGCCGAGCACCAACTGTACGGTACTGCGCCTGCGCCGACCGCCAACGCGCCCAG ${\tt TCTACGCTTGCGCGGCGCAACAGGGCCGACTGCAGCTGGAAG} \underline{{\tt ATG}} {\tt GCGGCGTCCGTGGTCTGTCGGGCCGCTACCC}$ ACCTTCGCTCAGGCGCTCCAGTTCGTGCCGGAGACGCAGGTTAGCCTGCTGGACAACGGCCTGCGTGTGGCCTCC GAGCAGTCCTCTCAGCCCACTTGCACGGTGGGAGTGTGGATTGATGTTGGCAGCCGTTTTGAGACTGAGAAGAAT AATGGGGCAGGCTACTTTTTGGAGCATCTGGCTTTCAAGGGAACAAAGAATCGGCCTGGCAGTGCCCTGGAGAAG GAGGTGGAGAGCATGGGGGCCCATCTTAATGCCTACAGCACCCGGGAGCACACAGCTTACTACATCAAGGCGCTG TCCAAGGATCTGCCGAAAGCTGTGGAGCTCCTGGGTGACATTGTGCAGAACTGTAGTCTGGAAGACTCACAGATT GAGAAGGAACGTGATGTGATCCTGCGGGAGATGCAGGAGATGATGCATCTATGCGAGATGTGGTCTTTAACTAC CTGCATGCCACAGCATTCCAGGGCACACCTCTAGCCCAGGCTGTGGAGGGGCCCAGTGAGAATGTCAGGAAGCTG TCTCGTGCAGACTTGACCGAGTACCTCAGCACACTTACAAGGCCCCTCGAATGGTGCTGGCAGCAGCTGGAGGA GTGGAGCACCAGCAACTGTTAGACCTCGCCCAGAAGCACCTCGGTGGCATCCCATGGACATATGCAGAGGACGCT GTGCCCACTCTTACTCCATGCCGCTTCACTGGCAGTGAGATCCGCCACCGTGATGATGCTCTACCTTTTGCCCAC GTGGCCATTGCAGTAGAGGGTCCTGGCTGGGCCAGCCCGGACAGTGTGGCCTTGCAAGTGGCCAATGCCATCATC GGCCACTATGACTGCACTTATGGTGGTGGCGTGCACCTGTCCAGCCCACTGGCTTCAGGTGCTGTGGCCAACAAG CTATGCCAGAGTTTCCAGACCTTCAGCATCTGCTATGCAGAGACGGGCTTGCTGGGGTGCACACTTTGTCTGTGAC CGAATGAAAATCGATGACATGATGTTCGTCCTGCAAGGGCAGTGGATGCGCCTGTGTACCAGTGCCACGGAGAGT GAGGTGGCCCGGGGCAAAAACATCCTCAGAAATGCCCTGGTATCTCATCTAGATGGCACTACTCCTGTGTGAG GACATCGGACGCAGCCTCCTGACCTATGGCCGCCGCATCCCCCTGGCTGAATGGGAAAGCCGGATTGCGGAGGTG GATGCCAGTGTGGTACGTGAGATCTGCTCCAAGTACATCTATGACCAGTGCCCAGCAGTGGCTGGATATGGCCCC ${\tt ATTGAGCAGCTCCCAGACTACAACCGGATCCGTAGCGGCATGTTCTGGCTGCGCTTC} {\color{red}{\textbf{TAG}}} {\tt GCGGGAAGCCTATGT}$ CCACAGGTGACCACCAATAAAATCCTCTGCTGAGA

PCT/US2003/028547

1220/6881 FIGURE 1135

MAASVVCRAATAGAQVLLRARRSPALLRTPALRSTATFAQALQFVPETQVSLLDNGLRVASEQSSQPTCTVGVWI
DVGSRFETEKNNGAGYFLEHLAFKGTKNRPGSALEKEVESMGAHLNAYSTREHTAYYIKALSKDLPKAVELLGDI
VQNCSLEDSQIEKERDVILREMQENDASMRDVVFNYLHATAFQGTPLAQAVEGPSENVRKLSRADLTEYLSTHYK
APRMVLAAAGGVEHQQLLDLAQKHLGGIPWTYAEDAVPTLTPCRFTGSEIRHRDDALPFAHVAIAVEGPGWASPD
SVALQVANAIIGHYDCTYGGGVHLSSPLASGAVANKLCQSFQTFSICYAETGLLGAHFVCDRMKIDDMMFVLQGQ
WMRLCTSATESEVARGKNILRNALVSHLDGTTPVCEDIGRSLLTYGRRIPLAEWESRIAEVDASVVREICSKYIY
DQCPAVAGYGPIEQLPDYNRIRSGMFWLRF

PCT/US2003/028547

FIGURE 1136

TCCGACTCATCCCGGCCCCGGGATGGCGTCCCCACGGGAATTGACACAGAACCCCCTGAAGAAGATCTGGATGCC ${\tt ATACAGCAATGGGCGGCCCGCTCTGCACGCTTGCCAGCGGGTGTGCCATGACCAACTGCCCAACTCTCATTGT}$ ${\tt CATGGTGGGCCTGCCCGCCAGGGGCAAGACCTACATCTCCAAGAAGCTGACTCGATACCTGAACTGGATTGGTGT}$ GCCCACTCGGGAGTTCAATGTTGGCCAGTATCGCCGGGACGTGGTCAAGACCTACAAATCTTTTGAATTTTTCT CCCCGACAATGAAGAGGGCCTGAAAATCAGGAAGCAGTGTGCCCTGGCAGCCCTCCGTGACGTCCGGCGGTTCCT TAGTGAGGAGGGGGGCATGTGGCGGTTTTTGATGCCACAAACACCCCGAGAACGGAGAGCGACCATCTTTAA TTTTGGAGAACAGAATGGCTACAAGACCTTTTTTGTCGAGTCCATCTGTGTGGATCCTGAGGTCATAGCTGCCAA CATCGTGCAAGTGAAACTGGGCAGCCCTGACTATGTCAACCGCGACAGTGATGAGGCTACGGAGGACTTCATGAG GCGCATTGAGTGCTATGAGAACTCCTACGAGTCGCTAGATGAGGACCTGGATAGGGACCTGTCCTATATCAAGAT CATGGATGTGGGCCAGAGCTACGTGGTGAACCGTGTGGCTGACCACATCCAGAGCCGCATCGTATATTACCTCAT TGGCGGGGACCCAGGACTGTCCCCTCGGGGCAGGGAGTTTGCCAAGAGTCTAGCCCAGTTCATCAGTGACCAAAA TATCAAGGATCTGAAGGTCTGGACAAGCCAGATGAAGAGGACAATCCAGACGGCTGAGGCACTGGGTGTGCCCTA TGAACAGTGGAAGGTCCTCAACGAGATCGATGCGGGCGTCTGTGAGGAAATGACCTACGAGGAAATTCAGGATAA TTATCCACTGGAGTTCGCCCTGCGGGACCAGGACAAGTACCGGTACCGTACCCTAAAGGGGAGTCCTACGAGGA CCTGGTCCAGAGACTGGAGCCTGTCATCATGGAGCTGGAGAGGCAAGAGAATGTGCTGGTCATCTGCCACCAGGC TGTGATGCGCTGCCTGGCCTACTTCCTCGACAAGGCAGCAGAACAGCTGCCCTACCTCAAGTGTCCGCTGCA CACAGTCCTGAAGCTGACTCCTGTGGCATATGGTTGTAAAGTGGAGTCCATATTCCTGAACGTGGCTGCTGAA CACGCACCGGGACAGGCCTCAGAACGTGGACATCTCAAGACCTCCAGAGGAAGCCCTTGTCACGGTGCCTGCTCA ${\tt ACTTGACCAGACTGCATCTGCATGGGCTGCGCGGAGGTTGCCCAGCCCCAGTTTCTTCCGGCGCAGCTCTTAGGT}$ GTTCCTACTGTGGCCCAGCTGCCCAGCATGGACCTGGTGACTCTCCACAGGGCCTCTACCATCCTCTGTGGCC CATCCTTACCCACCAGGAACTAGAGCCCCAACCACAGCAGATGCTTCCTGGGCAGCCACTGGCCAGGCCGTTGTA GAGGGCAGGGGGCAGTTGTGGCCCCCCCCCCAGTTGTGCATGTACCCGGCTACTTAGGTATGCTTAGGGGAG CTGGTGGCCAGGGGTGCCCCTTCAGGCCTGCTCTCACAGTGAAACCACTTCAAGACAGGGCAGGAAGTTACCTTC CCAATGGGGAGGCGGCCTCTCCCCTGTTGCTGCCCGTGTCCACACAGGAATGTACACTGGTGGCAGAAACATGCA TTTGCCATAAATAATTCAGAAAC

PCT/US2003/028547

FIGURE 1137

CTTCAGCAAGGACCAGTTCCCAGAGGTGTATGTGCCCACAGTGTTTGAGAACTATGTGGCAGATATCGAGGTGGA TGGAAAGCAGGTAGAGTTGGCTTTGTGGGACACAGCTGGGCAGGAAGATTATGATCGCCTGAGGCCCCTCTCCTA CCCAGATACCGATGTTATACTGATGTTTTTCCATCGACAGCCCTGATAGTTTAGAAAACATCCCAGAAAAGTG GACCCCAGAAGTCAAGCATTTCTGTCCCAACGTGCCCATCATCCTGGTTGGGAATAAGAAGGATCTTCGGAATGA TGAGCACACAAGGCGGGAGCTAGCCAAGATGAAGCAGGAGCCGGTGAAACCTGAAGAAGGCAGAGATATGGCAAA CAGGATTGGCGCTTTTGGGTACATGGAGTGTTCAGCAAAGACCAAAGATGGAGTGAGAGAGGGTTTTTGAAATGGC ${\tt CACAGCCCTTATGCGGTTAATTTTGAAGTGCTGTTTATTAATCTTAGTGTATGATTACTGGCCTTTTTCATTTAT}$ CTATAATTTACCTAAGATTACAAATCAGAAGTCATCTTGCTACCAGTATTTAGAAGCCAACTATGATTATTAACG ATGTCCAACCCGTCTGGCCCACCAGGGTCCTTTTGACACTGCTCTAACAGCCCTCCTCTGCACTCCCACCTGACA AATTAGGCTGTAACTACTTTATAACTAACATGTCCTGCCTATTATCTGTCAGCTGCAAGGTACTCTGGTGAGTCA ${\tt CCACTTCAGGGCTTTACTCCGTAACAGATTTTGTTGGCATAGCTCTGGGGTGGGCAGTTTTTTGAAAATGGGCTC}$ AAATAAAGTCAGATGGAAAATTCATTTTTTAAATTCCCGTTTTGTCACTTTTTCTGATAAAAGATGGCCATATTA CCCCTTTTCGGCCCCATGTATCTCAGTACCCCATGGAGCTGGGCTAAGTAAATAGGAATTGGTTTCACGCCTGAG GCAATTAGACACTTTGGAAGATGGCATAACCTGTCTCACCTGGACTTAAGCATCTGGCTCTAATTCACAGTGCTC CTCCAGCTGACTAAACTTTTTTCTGTACCAGTTAATTTTTCCAACTACTAATAGAATAAAGGCAGTTTTCT

PCT/US2003/028547

FIGURE 1138

MAAIRKKLVIVGDGACGKTCLLIVFSKDQFPEVYVPTVFENYVADIEVDGKQVELALWDTAGQEDYDRLRPLSYP DTDVILMCFSIDSPDSLENIPEKWTPEVKHFCPNVPIILVGNKKDLRNDEHTRRELAKMKQEPVKPEEGRDMANR IGAFGYMECSAKTKDGVREVFEMATRAALQARRGKKKSGCLVL

PCT/US2003/028547

FIGURE 1139

TGAGCCCCAGCTAAGCGCTGCCCTTGAGTATGTGCGGAGTCACCCCTTGGACCCCATCGACACTGTGGACTTCGA GCGGGAATGTGGCGTGGGTGTCATTGTGACCCCAGAGCAGATTGAGGAGGCTGTGGAGGCTGCTATTAACAGGCA CCGGCCCCAGCTCCTGGTGGAACGTTACCATTTCAACATGGGGCTGCTGATGGGAGAGGCTCGGGCTGTGCTGAA GTGGGCAGATGGCAAAATGATCAAGAATGAAGTGGACATGCAGGTCCTCCACCTTCTGGGCCCCAAGTTGGAGGC TGATCTGGAGAAGAAGTTCAAGGTGGCAAAAGCTCGGCTAGAAGAAAACAGACCGGAGGACGGCAAAGGATGTGGT GGAGAATGGCGAGACTGCTGACCAGACCCTGTCTCTGATGGAGCAGCTCCGGGGGGAGGCCCTTAAGTTCCACAA GATTACTGGTGGGCAGGTACCTGCCTTCCCGCCAGAACCCAATGGAATCCTGCATATTGGACATGCCAAAGC CATCAATTTCAACTTTGGCTATGCCAAGGCCAACAATGGCATCTGTTTTCTGCGTTTTGATGACACCAACCCTGA GAAGGAGGAAGCAAAGTTCTTCACGGCCATCTGTGACATGGTAGCCTGGCTAGGCTACACACCTTACAAAGTCAC ATATGCGTCTGACTATTTTGACCAGCTATATGCGTGGGCTGTGGAGCTCATCCGCAGGGGTCTGGCTTATGTGTG CCACCAGCGAGGAGGAGGCCCAAAAGGCCATAATACTCTGCCTTCACCCTGGAGAGACCGTCCCATGGAGGAGTC ACTGCTGCTCTTTGAGGCAATGCGCAAGGGCAAGTTTTCAGAGGGCGAGGCCACACTACGGATGAAGCTGGTGAT GGAGGATGGCAAGATGGACCCTGTAGCCTATCGAGTCAAGTATACACCACCACCGCACAGGGGACAAATGGTG **GGAATTCCAGGCCCG**

WO 2004/030615 PCT/US2003/028547

1225/6881 FIGURE 1140A

GAAGGCAGTTTCCGGAGGGAAGGGGTAGGGTTGGGGTGGGGGGGCGCTCTTCCGCCGGTGTTGCGCTCCTTCCCAGA ATCCGCTCCGGCCTTTCCTTCCTGCCGCGATTCCCAACTTTGCTCAAAGTCGCTGGACTCTAAGCTGTCGGAGGG ACCGCTGGACAGACCTGGGAACTGACAGAGGGCCTGGAGGGAAACAGGCCAAAGACCCCACAGGCAGAGTTGACAC GGAACCCCAAAGCAAGGAGGGGCTCGGGCCCGAGACCGTTCACCTCCCCTTATCCCTGTTCCCCTCTTCAGGA TGGAGCTGACCTCAAGGGAAAGAGGGGAGGGGACAGCCTCTGCCCTGGGAACTTCGACTGGGCCTACTGCTAAGCG GTGAGAGGGCCTGGTGGGGGCTGGGGGTTGTGGAATGTGATGGTAGTCCCTGGGAGTTGCCCTTGGGGCACATGA AGAATGGTATCCCTGCGGTCACCATCCAGCTGGACCTGGAGGCTGAGTTTCATTTCACACACCTCATTATGACCT TCAAGACATTTCGCCCTGCTGCCATGCTGGTGGAACGCTCAGCAGACTTTGGCCGCACCTGGCATGTGTACCGAT ATTTCTCCTATGACTGTGGGGCTGACTTCCCAGGAGTCCCACTAGCACCCCCACGGCACTGGGATGATGTAGTCT GTGAGTCCCGCTACTCAGAGATTGAGCCATCCACTGAAGGCGAGGTCATCTATCGTGTGCTGGACCCTGCCATCC CTATCCCAGACCCCTACAGCTCACGGATTCAGAACCTGTTGAAGATCACCAACCTACGGGTGAACCTGACTCGTC TACACACGTTGGGAGACAACCTACTCGACCCACGGAGGGGAGATCCGAGAGAAGTACTATGCCCTCTATGAGC TGGTTGTACGTGGCAACTGCTTCTGCTACGGACACGCCTCAGAGTGTGCACCCGCCCCAGGGGCACCAGCCCATG TCTATCGTGACCTGCCCTGGCGTCCGGCTGAGGACGGCCATAGTCATGCCTGTAGGAAGTGTGAGTGCCATGGGC ACACCCACAGCTGCCACTTCGACATGGCCGTATACCTGGCATCTGGCAATGTGAGTGGAGGTGTGTGATGGAT GGGATCCGGCTGTGTGCCGCTCCTGTGATTGTGACCCCATGGGTTCTCAAGACGGTGGTCGCTGTGATTCCCATG ATGACCCTGCACTGGGACTGGTCTCCGGCCAGTGTCGCTGCAAAGAACATGTGGTGGGCACTCGCTGCCAGCAAT GCCGTGATGGCTTCTTTGGGCTCAGCATCAGTGACCGTCTGGGCTGCCGGCGTATGTCAATGTAATGCACGGGGC ACAGTGCCTGGGAGCACTCCTTGTGACCCCAACAGTGGATCCTGTTACTGCAAACGTCTAGTGACTGGACGTGGA TGTGACCGCTGCCTGCCTGGCCACTGGGGCCTGAGCCACGACCTGCTCGGCTGCCCCCTGTGACTGCGACGTG GGTGGTGCTTTGGATCCCCAGTGTGATGAGGGCACAGGTCAATGCCACTGCCGCCAGCACATGGTTGGGCGACGC TGTGAGCAGGTGCAACCTGGCTACTTCCGGCCCTTCCTGGACCACCTAATTTGGGAGGCTGAGGACACCCGAGGG CAGGTGCTCGATGTGGTGGACCCCTGGTGACCCCCGGGGAAACTCCATCCTGGACTGGCTCAGGCTTCGTGCGG CTACAGGAAGGTCAGACCCTGGAGTTCCTGGTGGCCTCTGTGCCGAAGGCTATGGACTATGACCTGCTGCGC AGCCTGTGTGGGCCATTTGGTGCCCAAGGATGATCGCATCCAAGGGACTCTGCAACCACATGCCAGGTACTTGATA TTTCCTAATCCTGTCTGCCTTGAGCCTGGTATCTCCTACAAGCTGCATCTGAAGCTGGTACGGACAGGGGGAAGT GCCCAGCCTGAGACTCCCTACTCTGGACCTGGCCTGCTCATTGACTCGCTGGTGCTGCCCCGTGTCCTGGTG CTAGAGATGTTTAGTGGGGGTGATGCTGCCCTGGAGCGCCAGGCCACCTTTGAACGCTACCAATGCCATGAG GAGGGTCTGGTGCCCAGCAAGACTTCTCCCTCTGAGGCCTGCGCACCCCTCCTCATCAGCCTGTCCACCCTCATC TACAATGGTGCCCTGCCATGTCAGTGCAACCCTCAAGGTTCACTGAGTTCTGAGTGCAACCCTCATGGTGGTCAG TGCCTGTGCAAGCCTGGAGTGGTTGGGCGCCGCTGTGACCTCTGTGCCCCTGGCTACTATGGCTTTGGCCCCACA GGCTGTCAAGCCTGCCAGTGCAGCCACGAGGGGGCACTCAGCAGTCTCTGTGAAAAGACCAGTGGGCAATGTCTC TGTCGAACTGGTGCCTTTGGGCTTCGCTGTGACCGCTGCCAGCGTGGCCAGTGGGGATTCCCTAGCTGCCGGCCA TGTGTCTGCAATGGGCATGCAGATGAGTGCAACACCCACACAGGCGCTTGCCTGGGCTGCCGTGATCACACAGGG GGTGAGCACTGTGAAAGGTGCATTGCTGGTTTCCACGGGGACCCACGGCTGCCATATGGGGGCCAGTGCCGGCCC TGTCCCTGTCCTGAAGGCCCTGGGAGCCAACGGCACTTTGCTACTTCTTGCCACCAGGATGAATATTCCCAGCAG ATTGTGTGCCACTGCCGGGCAGGCTATACGGGGCTGCGATGTGAAGCTTGTGCCCCTGGGCACTTTGGGGACCCA TCAAGGCCAGGTGGCCGGTGCCAACTGTGTGAGTGCAGTGGGAACATTGACCCAATGGATCCTGATGCCTGTGAC CCCCACACGGGGCAATGCCTGCGCTGTTTACACCACACAGAGGGTCCACACTGTGCCCACTGCAAGCCTGGCTTC CATGGGCAGGCTGCCCGACAGAGCTGTCACCGCTGCACATGCAACCTGCTGGGCACAAATCCGCAGCAGTGCCCA TCTCCTGACCAGTGCCACTGTGATCCAAGCAGTGGGCAGTGCCCATGCCTCCCCAATGTCCAGGGCCCTAGCTGT

PCT/US2003/028547

FIGURE 1140B

GCCAGAGGCCCCACCTGCAACGAGTTCACAGGGCAGTGCCACTGCCGTGCCGGCTTTGGAGGGCGGACTTGTTCT GAGTGCCAAGAGCTCCACTGGGGAGACCCTGGGTTGCAGTGCCATGCCTGTGATTGTGACTCTCGTGGAATAGAT ACACCTCAGTGTCACCGCTTCACAGGTCACTGCAGCTGCCGCCCAGGGGTGTCTGGTGTGCGCTGTGACCAGTGT CAGGACTTGGCAGCCCGTACACAGCGCCTAGAGCAGCGGGCGCAGGAGTTGCAACAGACGGGTGTGCTGGGTGCC TTTGAGAGCAGCTTCTGGCACATGCAGGAGAAGCTGGGCATTGTGCAGGGCATCGTAGGTGCCCGCAACACCTCA GCCGCCTCCACTGCACAGCTTGTGGAGGCCACAGAGGAGCTGCGGCGTGAAATTGGGGAGGCCACTGAGCACCTG ACTCAGCTCGAGGCAGACCTGACAGATGTGCAAGATGAGAACTTCAATGCCAACCATGCACTAAGTGGTCTGGAG CGAGATAGGCTTGCACTTAATCTCACACTGCGGCAGCTCGACCAGCATCTTGACTTGCTCAAACATTCAAACTTC CTGGGTGCCTATGACAGCATCCGGCATGCCCATAGCCAGTCTGCAGAGGCAGAACGTCGTGCCAATACCTCAGCC GAGGACTTCAACAGCAAACACATGGCCAACCAGCGGGCACTTGGCAAGCTCTCTGCCCATACCCACACCCTGAGC CTGACAGACATAAATGAGCTGGTGTGGGGGCACCAGGGGATGCACCCTGTGCTACAAGCCCTTGTGGGGGTGCC GGCTGTCGAGATGAGGATGGGCAGCCGCGCTGTGGGGGCCTCAGCTGCAATGGGGCAGCGGCTACAGCAGACCTA GCACTGGGCCGGGCCCGGCACACACAGGCAGAGCTGCAGCGGGCACTGGCAGAAGGTGGTAGCATCCTCAGCAGA GTGGCTGAGACTCGTCGGCAGGCAAGCGAGGCACAGCAGCCCCAGGCAGCCCTGGACAAGGCTAATGCTTCC AGGGGACAGGTGGAACAGGCCAACCAGGAACTTCAAGAACTTATCCAGAGTGTGAAGGACTTCCTCAACCAGGAG GGGGCTGATCCTGATAGCATTGAAATGGTGGCCACACGGGTGCTAGAGCTCTCCATCCCAGCTTCAGCTGAGCAG ${\tt ATCCAGCACCTGGCGGTGCGATTGCAGAGCGAGTCCGGAGCCTGGCAGATGTGGATGCGATCCTGGCACGTACT}$ GTAGGAGATGTGCGTGCCGAGCAGCTACTGCAGGATGCACGGCGGGCAAGGAGCTGGGCTGAGGATGAGAAA GGGCCAGTGGCTGACACACGGGACACAGAGCAGACCCTGTACCAGGTACAGGAGAGGATGGCAGGTGCAGAGCGG GCACTGAGCTCTGCAGGTGAAAGGGCTCGGCAGTTGGATGCTCTCCTGGAGGCTCTGAAATTGAAACGGGCAGGA CTACGCGGTCCTCTGGGTGATCAGTACCAGACGGTGAAGGCCCTAGCTGAGCGCAAGGCCCAAGGTGTGCTGGCT GCACAGGCAAGGCAGAACAACTGCGGGATGAGGCTCGGGACCTGTTGCAAGCCGCTCAGGACAAGCTGCAGCGG CTACAGGAATTGGAAGGCACCTATGAGGAAAATGAGCGGGCACTGGAGAGTAAGGCAGCCCAGTTGGACGGGTTG GAGGCCAGGATGCGCAGCGTGCTTCAAGCCATCAACTTGCAGGTGCAGATCTACAACACCTGCCAGTGACCCCTG AGGGCCCCCAATAAACCAGTGTGAACCCCC

PCT/US2003/028547

1227/6881 FIGURE 1141

TGGCAGAATCAAGATGAGGCCCTGTCATGCCTCCCCAGTGAGGCCTACAGTCTGAGCAGACAGCATGGCCTGCCA $\tt CTGGCAGTGAACACCATGTCTGCAGGAGGTGGCCGGGCCTTTGCTTGGCAAGTGTTCCCCCCCATGCCCACTTGC$ GGTGCAGCTGCGGTAGTTCTGGGCAAGCAGGTGCTAGTGGTGGTGGTGTGGATGAGGTCCAGAGCCCGGTAGCT GCAACTGTGGAGAGAGATGGTATGGTGTATGCTCTGGGGGGGAATGGGCCCTGACACGGCCCCCAGGCCCAGGTA CGTGTGTATGACCCCCGTCGGGACTGCTGGCTTTCGCTACCCTCCATGCCCACACCCTGCTATGGGGCCTCCACC TTCCTGCACGGGAACAAGATCTATGTCCTGGGGGGCCGCCAGGGCAAGCTCCCGGTGACTGCTTTTGAAGCCTTT GAAGGCAGCGTCTTTAGCCTGGGTGGCCTGCAGCAGCCTGGGCCCCACAACTTCTACTCTCGCCCACACTTTGTC AACACTGTGGAGATGTTTGACCTGGAGCATGGGTCCTGGACCAAATTGCCCCGCAGCCTGCGCATGAGGGATAAG AGGGCAGACTTTGTGGTTGGGTCCCTTGGGGGGCCACATTGTGGCCATTGGGGGCCTTGGAAACCAGCCATGTCCT TCCTGCTCTAGTCTGCAGGCTGGGCCCCGGCTGTTTGTTATTGGGGGTGTGGCCCAGGGCCCCAGTCAAGCCGTG GAGGCACTGTGTCTGCGTGATGGGGTCTGAAGGCTTGGTGGGAGCTGTCCACTGGAGCAGCTCATTGCCAGAGGC GCACTTGAAACACTGCCTTGGGGCCTTGGGTTAGGGGAGCCTTTGTCTTTAGTGCAGGACACACATATGCTTACA CCTACCTTTATCACCATTCGTTCATGAATCATGCCTAGCTCCATCCTTGCCCTGGGACCTACTAGGCCTTCCATC CAACTGGGAAATGGGGAGAAGCAAAGCTGGCCTCATGCTCTTCAGGGTCAGTTCCTATCTGGAGTTGACCAGGCC TACCCCAGTTGCCATTCCTGAAAAATCTCAGCTGCCAGGCTGCCTTTAGGGTCCCTGCAGACCCAGGAGAGTTGA GAGGGTGGGGGACACAGAGAGAATAGAGAGGGTGTGGGAACTGCCAGAGGGCCGGAGCGCAGGAGTTCAAGTGGA GGAATGCTGGCTTTGAGCCCTCTACACTGCTGGTTGTATGACCTTGGACAAGTCACTTCACCTCTGTGCCTCA GCATCCTCATCTATAAATGGGGATCTCTGAAACCTTCCTACCCTACCTCACAGGGCTGTTGTGAGGACCCA GGGAGTTTGGATGTGGAAGTAAAAGTGCTGCTAAAACCTA

PCT/US2003/028547

FIGURE 1142

MSAGGGRAFAWQVFPPMPTCRVYGTVAHQDGHLLVLGGCGRAGLPLDTAETLDMASHTWLALAPLPTARAGAAAV VLGKQVLVVGGVDEVQSPVAAVEAFLMDEGRWERRATLPQAAMGVATVERDGMVYALGGMGPDTAPQAQVRVYDP RRDCWLSLPSMPTPCYGASTFLHGNKIYVLGGRQGKLPVTAFEAFDLEARTWTRHPSLPSRRAFAGCAMAEGSVF SLGGLQQPGPHNFYSRPHFVNTVEMFDLEHGSWTKLPRSLRMRDKRADFVVGSLGGHIVAIGGLGNQPCPLGSVE SFSLARRRWEALPAMPTARCSCSSLQAGPRLFVIGGVAQGPSQAVEALCLRDGV

PCT/US2003/028547

FIGURE 1143

GGCGGCAGAGAGAGACT<u>ATC</u>GAACGTCAGGTGCTGCTGAGCCAGCCCGAGGAGGCGGCGGCTCTGTATCGGGGC CTTAGCCGCCAGCCCGCGCTGAGCGCCCTGCCTGGGCCCGGAGGTCACCACGCAGTACGGCGGCCAATACCGG ACGGTGCACACTGAGTGGACCCAGAGGGACCTGGAACGCATGGAGAACATTCGATTCTGCCGCCAATACCTGGTG TTCCATGACGGGGACTCAGTGGTGTTTGCAGGACCTGCAGGCAACAGTGTGGAGACCCGGGGGGAACTGCTGAGC AGAGAGTCTCCTTCAGGCACCATGAAAGCTGTGCTGCGCAAGGCTGGAGGCACGGGCCCTGGGGAAGAAGCAG TTCCTGGAGGTCTGGGAGAAGAACCGGAAGCTCAAGAGCTTCAACCTGTCAGCGCTGGAGAAACATGGGCCTGTT TATGAGGATGACTGCTTTGGCTGCCTGTCCTGGTCGCACTCGGAGACACTTGTTGTATGTGGCAGAGAAGAAG CGCCCCAAGGCCGAGTCCTTCTTTCAGACCAAAGCCTTGGACGTCAGTGCCAGCGATGATGAGATAGCCAGGCTG AAGAAGCCAGACCAAGCCATCAAGGGGGATCAGTTTGTGTTTTATGAAGACTGGGGAGAAAACATGGTTTCCAAA AGCATCCCTGTGCTCTGCGTGCTGGATGTCGAGAGTGGCAACATCTCTGTGCTTGAGGGGGTCCCTGAGAATGTG TTGGGCATCCGCTTTTGCACCAATCGCAGGTCAGCCCTGTATTATGTGGACCTCATCGGGGGGAAGTGTGAGCTC CTCTCGGATGACTCCCTGGCTGTCTCTCCCCGGCTGAGCCCAGACCAATGTCGCATTGTCTACCTGCAGTAC CCATCTCTGATCCCCCATCACCAATGCAGCCAGCTGTGCCTGTATGACTGGTATACCAAGGTTACCTCAGTGGTG GTAGATGTTGTGCCTCGGCAGCTGGGAGAGAACTTCTCTGGGATCTACTGCAGCCTTCTGCCTTTGGGATGCTGG TCAGCTGACAGCCAGAGAGTGGTCTTTGACTCGGCTCAGCGCAGCCGGCAGGACCTGTTTGCTGTGGACACCCAA GTGGGCACTGTGACCTCCCTCACAGCTGGAGGGTCAGGTGGGAGCTGGAAGTTGCTCACAATTGACCAGGACCTC ATGGTGGCACAGTTTTCCACACCCAGCCTACCTCCAACCCTGAAAGTTGGGTTCCTGCCTTCTGCAGGGAAGGAG CAGTCAGTGTTGTGGGTGTCCCTGGAGGAGGCCGAGCCCATTCCCGACATCCACTGGGGCATCCGGGTGCTACAG CCACCCCAGAGCAAGAGAATGTGCAGTATGCTGGCCTTGACTTTGAAGCAATCCTGCTGCAGCCTGGCAGCCCT CCAGATAAGACCCAAGTGCCCATGGTGGTCATGCCCCACGGGGGGCCCCATTCATCCTTTGTCACTGCCTGGATG CTGTTCCCAGCCATGCTTTGCAAGATGGGCTTTGCGGTACTACTAGTGAACTATCGTGGCTCCACGGGCTTTGGC CAGGACAGCATCCTCCCCCCCCAGGCAATGTGGGCCCACCAGGATGTGAAGGATGTCCAGTTTGCAGTGGAACAG GTGCTCCAGGAGGAACACTTTGATGCAAGCCATGTGGCCCTTATGGGTGGTTCCCATGGTGGCTTCATTTCCTGC CACTTGATTGGTCAGTACCCAGAGACCTACAGGGCCTGCGTGGCCCGGGAACCCCGTGATCAACATCGCCTCCATG CTCAGCGTGTGGGCTGAGATGCTGGACAAATCGCCCATCAGATACATCCCTCAGGTGAAGACACCACTGTTACTG ATGTTGGGCCAGGAGGACCGGCGTGTGCCCTTCAAGCAGGGCATGGAGTATTACCGTGCCCTCAAGACCCGGAAT GTGCCTGTTCGGCTCCTGCTCTATCCCAAAAGCACCCACGCATTATCAGAGGTGGAGGTGGAGTCAGACAGCTTC $\tt ATGAATGCTGTGCTCTGGCTACGCACACACTTGGGCAGC\underline{TGA} AGCCCTGCCATTCTGCATGAGCTGATCAGCCTG$ TGCCACACTTCGCTCTTGAGGAGCTCAACGGTCTGGCAGGGCAGCAGGAGGCTTTCTGGGCTCTGGACTCCACGG ATGCGTGGGCAGAGGAATGTGGGCTATGTAGTCATAATAAATTAGGAC

PCT/US2003/028547

1230/6881 FIGURE 1144

MERQVLLSEPEEAAALYRGLSRQPALSAACLGPEVTTQYGGQYRTVHTEWTQRDLERMENIRFCRQYLVFHDGDS VVFAGPAGNSVETRGELLSRESPSGTMKAVLRKAGGTGPGEEKQFLEVWEKNRKLKSFNLSALEKHGPVYEDDCF GCLSWSHSETHLLYVAEKKRPKAESFFQTKALDVSASDDEIARLKKPDQAIKGDQFVFYEDWGENMVSKSIPVLC VLDVESGNISVLEGVPENVSPGQAFWAPGDAGVVFVGWWHEPFRLGIRFCTNRRSALYYVDLIGGKCELLSDDSL AVSSPRLSPDQCRIVYLQYPSLIPHHQCSQLCLYDWYTKVTSVVVDVVPRQLGENFSGIYCSLLPLGCWSADSQR VVFDSAQRSRQDLFAVDTQVGTVTSLTAGGSGGSWKLLTIDQDLMVAQFSTPSLPPTLKVGFLPSAGKEQSVLWV SLEEAEPIPDIHWGIRVLQPPPEQENVQYAGLDFEAILLQPGSPPDKTQVPMVVMPHGGPHSSFVTAWMLFPAML CKMGFAVLLVNYRGSTGFGQDSILSLPGNVGHQDVKDVQFAVEQVLQEEHFDASHVALMGGSHGGFISCHLIGQY PETYRACVARNPVINIASMLGSTDIPDWCVVEAGFPFSSDCLPDLSVWAEMLDKSPIRYIPQVKTPLLLMLGQED RRVPFKQGMEYYRALKTRNVPVRLLLYPKSTHALSEVEVESDSFMNAVLWLRTHLGS

PCT/US2003/028547

1231/6881 FIGURE 1145

TACTCCCGGAGTCACTCATCCCTTAAGCAAGCAGGGTGGGGTTAGGTGCGCGTGCGCGGTTTTAATACTCCTCCC GTCCCGGAAGACCACGCGTGCGTGGGGGGACTACGGTGACAGTACCCCGGGTGGGGCGAGGGCCAGTCATG CGGAGTCCTGGTCTGGGCAGGCCTTGCAGGCTCTGCCGGCCACGGTGCTGGGCGCGCTGGGCAGCGAGTTCTTGC GCATCCAGCTGGCGTGGGGGTTCTACGGGAATACAGTGACCGGGTTGTATCACCGTCCAGGTCTGGGTGGTCAGA ATGGATCCACGCCTGATGGCTCCACGCATTTCCCTTCGTGGGAAATGGCAGCAAACGAACCTCTCAAAACCCACA GAGAA<u>TAA</u>GGGAAGGCAGCAGAGGGTCTCCAAGGGCATCACTGGGTCTGCTGGCTTCTACACTGGGTTCTGCTAC TCCCCAGACCTCAGGGACAACTGCCGGGGGTTCAGGGTTGGTAGCAGGGAGTACCCAGTGCCTACAGGGCTGGGC CTCTTCTGCCTCTTAAGCCTGCTCCCTCACCCAGGCACTGGGCAAGTGAAGAGTTTGCCTGTACTCTTATCTGGG TGCCTTAAGGAGAGATTGTGTTCTTCCTCTCAGGGGTGATAACTCAGGAAGCCTCTGGGTTGGGAAGACCA TCAGTTCTTTTGTCTTAGGTTTCTTTTCCTGTCCCTCTTCCATCCCCAAGATGTGACCCCATAAAAATTTTTCCT AGGAGTTCGAGACCAGCCTGACCAACATGGTGAAAAACCCCATCTCTACTAAAAATACAAAAATTAGCCGGGTGTG GTGGCACACACCAGTAATCCCAGCTACTCGGGAGGCTGAAGCAGGAGATTTGCTTGAACCTGGGAGGCAGAGGTT TTCCTGAGAGGAAGCCTGAGGTTGACCAGCTCTGGGGTTTGTAAGGCAGGTCTGTTTTCTCCTAGGCCCTGAGTT TTCTGAATCTCTGGTTTTGCTTTGTTGGCAAGGAGCCAGGGAATCCTGACCTGAGCCAGACCTTAAGCTCTATGG TTATTTAGCTGGCCATTCAGGTATAAGGCAGGTGGTGTACCTGCTGGCACTATCCAGATGGAGGCACCAAACAC CCACATACCTGGCCCAACCAGACTTCTCCCGTGAGCCAGGCAAAGGAAATTGTCATCTGCCAACTGTCCTACTCA TATTCCTCTCAGTCCTTCTTGGGGGTAAGCTGATTACCTGAAGGACAGCTGAACCCCTGGGGTAGCCTCCTATCC ACCACTGCTTAAGTGCCTATGGGAATGTGGGTCTGCACCTTGTCCCCTCATAGGATGGTACCAAGCATTTAGTGC ACAGTGGCCCCATCATAGCCTGCAGCCTCATCATTTCCCATCTGGACCTGGTACAAATGCACGTCACAGGCTCAG CTCCTCCCCACTAGCATCTTCTCTACCTTCAAGAACCAGGCAGCCCTGCCATGTCACAATAGGCCAGGGGAGTTT CCAAAGATGTGGGTGGCAAATGCCCCTATAGAAACACCAGTACCTGAAAGCACTGTAGCCCTGGACCTGCCTCCT GTTGGATATCATACTTCCATCTGGCTGCCTTTGCTTAAGCCATCTTTGTGGTAGAGGGGCCCTGGAATTGCAGCT CACCCAGGCTCAACTGAGGATGTGGCTTATTAAACACGGAAGTGC

PCT/US2003/028547

FIGURE 1146

 ${\tt MAESWSGQALQALPATVLGALGSEFLREWEAQDMRVTLFKLLLLWLVLSLLGIQLAWGFYGNTVTGLYHRPGLGG} \\ {\tt QNGSTPDGSTHFPSWEMAANEPLKTHRE}$

PCT/US2003/028547

FIGURE 1147

CCCGAGTGCTTCCCGCAGAGGGCTGGTGGTGGGAGCGGAGTGGGTCGGGCCGAGCCGGGCCGTGGGCCGT CCGAGCGCTCTAAGATGATCGACAAGAACCTGCGGGAGGACGAGAGAAGGCGGCGCGGGAGGTGAAGTTGCTGC TGTTGGGTGCTGGGGAGTCAGGGAAGAGCACCATCGTCAAGCAGATGAAGATCATCCACGAGGATGGCTACTCCG AGGAGGAATGCCGGCAGTACCGGGCGGTTGTCTACAGCAACACCATCCAGTCCATCATGGCCATTGTCAAAGCCA TGGGCAACCTGCAGATCGACTTTGCCGACCCCTCCAGAGCGGACGACGCCAGGCAGCTATTTGCACTGTCCTGCA CCGCCGAGGAGCAAGGCGTGCTCCCTGATGACCTGTCCGGCGTCATCCGGAGGCTCTGGGCTGACCATGGTGTGC AGGCCTGCTTTGGCCGCTCAAGGGAATACCAGCTCAACGACTCAGCTGCCTACTACCTGAACGACCTGGAGCGTA TTGCACAGAGTGACTACATCCCCACACAGCAAGATGTGCTACGGACCCGCGTAAAGACCACGGGGATCGTGGAGA TCCACTGCTTTGAGGGCGTCACAGCCATCATCTTCTGCGTAGCCTTGAGCGCCTATGACTTGGTGCTAGCTGAGG ACGAGGAGATGAACCGCATGCATGAGAGCATGAAGCTATTCGATAGCATCTGCAACAACAAGTGGTTCACAGACA CGTCCATCATCCTCTCCTCAACAAGAAGGACCTGTTTGAGGAGAAGATCACACAGTCCCCTGACCATCTGCT AGCGCAAAGACACCAAGGAGATCTACACGCACTTCACGTGCGCCACCGACACCAAGAACGTGCAGTTCGTGTTTG GGATGGGCCACCGCCGACTTTGTACCCCCCAACCCCTGAGGAAGATGGGGGGCAAGAAGATCACGCTCCCCGCCTG TTCCCCGCCGCTTTTCTCCTCTTTCCTCTTTGTTCTCAGCTCCCCTGTCCCCTCAGCTCCAGACGTAGGGG AGGGGTTGCCACAGGCCTCCCTGTTTGAAGCCTGCCCTTGTCTGAGATGCTGGTAATGGCCATGGTACCCCCTTC GGCTGCGTCTGGAGGGGCCCCTGCTTCTCCAGCCTGGACCCCAGCTTTGCCCAACACCAGCCCCTGCCCCAGCC CAAGTCCAAATGTTTACAGGGAGCCTCCTGCCCAGTCCCCAACCCCAGCCGCTCGGAGGCCCCAAAGGAAAAAG CACAAGAAGCGTGAGACGCCACCATTCCTGGAAACCACAGTCC

PCT/US2003/028547

FIGURE 1148

MGCTVSAEDKAAAERSKMIDKNLREDGEKAAREVKLLLLGAGESGKSTIVKQMKIIHEDGYSEEECRQYRAVVYS
NTIQSIMAIVKAMGNLQIDFADPSRADDARQLFALSCTAEEQGVLPDDLSGVIRRLWADHGVQACFGRSREYQLN
DSAAYYLNDLERIAQSDYIPTQQDVLRTRVKTTGIVETHFTFKDLHFKMFDVGGQRSERKKWIHCFEGVTAIIFC
VALSAYDLVLAEDEEMNRMHESMKLFDSICNNKWFTDTSIILFLNKKDLFEEKITHSPLTICFPEYTGANKYDEA
ASYIQSKFEDLNKRKDTKEIYTHFTCATDTKNVQFVFDAVTDVIIKNNLKDCGLF

PCT/US2003/028547

FIGURE 1149

TCTGTGATTGTGGCCAGGCGGGGCACCCTCGGAGGGGAGGGTTCGGAAGTGGAATGCGACCCCCAGCCTCTTTC CCCTAGGGGCTGTAATCTGATCCCTGGGGACTCCCCCCCTAGCCTCCCGCCCTCACTGCTGACTCCTCT AGCTGCTGAG<u>ATG</u>GGGCGGGCCGGGGCTGCCGCCGTGATCCCGGGCCTGGCCCTGCTCTGGGCAGTGGGGCTGGG GAGTGCCGCCCCAGCCCCCACGCCTTCGGCTCTCCTTCCAAGAGCTCCAGGCCTGGCATGGTCTCCAGACTTT CAGCCTGGAGCGAACCTGCTGCTACCAGGCCTTGCTGGTGGATGAGGAGCGTGGACGCCTGTTTGTGGGTGCCGA ATGGCGAGAGGGGGCACTGGGCAGGGAAGGACATTGGTACTGAGTGCATGAACTTCGTGAAGTTGCTGCATGC CTACAACCGCACCCATTTGCTGGCCTGTGGCACGGGAGCCTTCCACCCAACCTGTGCCTTTGTGGAAGTGGGCCA CAGGCATCGGGCTGCCTCCTGCTGGTGGGGGGGGGGGCTATACTCAGGGGTGGCAGCAGACCTCATGGGACGAGA CTTTACCATCTTTCGCAGCCTAGGGCAACGTCCAAGTCTCCGAACAGAGCCACACGACTCCCGCTGGCTCAATGA GCCCAAGTTTGTCAAGGTATTTTGGATCCCGGAGAGCGAGAACCCAGACGACGACAAAATCTACTTCTTTCG TGAGACGGCGGTAGAGGCGGCGCCGGCACTGGGACGCCTGTCCGTGTCCCGCGTTGGCCAGATCTGCCGGAACGA CGTGGCCGCCAGCCTGGTCAACAAGTGGACGACGTTCCTGAAGGCGCGGCTGGTGTCCTGGTGCCCGG CGTCGAGGGCGACACCCACTTCGATCAGCTCCAGGATGTTTTCTGTTGTCCTCGCGGGACCACCGGACCCCGCT GCTCTATGCCGTCTTCTCCACGTCCAGCAGCATCTTCCAGGGCTCTGCGGTGTGCGTGTACAGCATGAACGACGT GCGCCGGGCCTTCTTGGGACCCTTTGCACACAGGAGGGGCCCATGCACCAGTGGGTGTCATACCAGGGTCGCGT CCCCTACCCGCGGCCAGGCATGTGCCCCAGCAAGACCTTTGGCACCTTCAGTTCCACCAAGGACTTCCCAGACGA TGTCATCCAGTTTGCGCGGAACCACCCCTCATGTACAACTCTGTCCTGCCCACTGGGGGGCGCCCTCTTTTCCT ACAAGTTGGAGCCAATTACACCTTCACTCAAATTGCCGCGGACCGGGTTGCAGCCGCTGACGGACACTATGACGT CCTCTTCATTGGCACAGACGTTGGCACGGTGCTGAAGGTGATCTCGGTCCCCAAGGGCAGTAGGCCCAGCGCAGA GGGGCTGCTCCTGGAGGAGCTGCACGTGTTTGAGGACTCGGCCGCTGTCACCAGCATGCAAATTTCTTCCAAGAG GCACCAGCTGTACGTAGOCTCGCGGAGCGCGGTGGCCCAGATCGCGTTGCACCGCTGCGCTGCCCACGGCCGCGT TGCCAAGAGGCGGTTCCGGCGGCAAGACGTAAGGAATGGCGACCCCAGCACGTTGTGCTCCGGAGACTCGTCTCG GCAGGCGCGCGTGGAGTGGACTTTCCAGCGCGCAGGGGTGACAGCCCACACCCAGGTGCTGGCAGAGGAGCGCAC CGAGCGCACCGCCGGGGACTACTGCTGCGCAGGCTGCGGCGCGGGGACTCGGGCGTGTACTTGTGCGCCGCCGT CGAGCAGGGCTTTACGCAACCGCTGCGTCGCCTGTCGCTGTACGTGTTGAGTGCTACGCAGGCCGAACGACTGGC GCGGGCCGAGGAGGCTGCGCCGCCGCCGCCGGGCCCCAAACTCTGGTACCGGGACTTTCTGCAGCTGGTGGA GTCGCGGAGAAAGGGCCGTAACCGGAGGACCCACGCCCCTGAGCCTCGCGCTGAGCGGGGGCCGCGCAGCGCAAC TGAAAAGAAGGACGGGTTGGGGCCGGGCACATTGGGGGTCACCGGCCGATGGAGACACCAACCGACAGGCCCTGG CTGAGGGCAGCTGCGCGGGCTTATTTATTAACAGGATAACCCTTGAATGTAGCAGCCCCGGGAGGGCGCACAGG TCGGGCGCAGGATTCAGCCGGAGGGAAGGGACGGGGAAGCCGAGCTCCAGAGCAACGACCAGGGCCGAGGAGGTG CCTGGAGTGCCCACCTGGGAGACAGACCCCACCTCCTTGGGTAGTGAGCAGTGAGCAGAAAGCTGTGAACAGGC TGGGCTGCTGGAGGTGGGGCGAGGCCGACTGTACTAAAGTAACGCAATAAACGCATTATCAGCCA

PCT/US2003/028547

1236/6881 FIGURE 1150

MGRAGAAAVIPGLALLWAVGLGSAAPSPPRLRLSFQELQAWHGLQTFSLERTCCYQALLVDEERGRLFVGAENHV ASLNLDNISKRAKKLAWPAPVEWREECNWAGKDIGTECMNFVKLLHAYNRTHLLACGTGAFHPTCAFVEVGHRAE EPVLRLDPGRIEDGKGKSPYDPRHRAASVLVGEELYSGVAADLMGRDFTIFRSLGQRPSLRTEPHDSRWLNEPKF VKVFWIPESENPDDDKIYFFFRETAVEAAPALGRLSVSRVGQICRNDVGGQRSLVNKWTTFLKARLVCSVPGVEG DTHFDQLQDVFLLSSRDHRTPLLYAVFSTSSSIFQGSAVCVYSMNDVRRAFLGPFAHKEGPMHQWVSYQGRVPYP RPGMCPSKTFGTFSSTKDFPDDVIQFARNHPLMYNSVLPTGGRPLFLQVGANYTFTQIAADRVAAADGHYDVLFI GTDVGTVLKVISVPKGSRPSAEGLLLEELHVFEDSAAVTSMQISSKRHQLYVASRSAVAQIALHRCAAHGRVCTE CCLARDPYCAWDGVACTRFQPSAKRRFRRQDVRNGDPSTLCSGDSSRPALLEHKVFGVEGSSAFLECEPRSLQAR VEWTFQRAGVTAHTQVLAEERTERTARGLLLRRLRRRDSGVYLCAAVEQGFTQPLRRLSLHVLSATQAERLARAE EAAPAAPPGPKLWYRDFLQLVEPGGGGSANSLRMCRPQPALQSLPLESRRKGRNRRTHAPEPRAERGPRSATHW

PCT/US2003/028547

1237/6881 FIGURE 1151

ATGGGCCCCAAAAAATCTTGGCGAAGTCACTTTTTTCCACTGCCTGAGGTTTGGCTGTTGCTCCTGTTATCCCAA GCTCTAAGCCCTTCCCATGGTCCCCAGACCCAGGCAGGGGTAGGTCTCGTCTGGAGTGTCCCGCTGCCAAGTGCC CTGAGAAGCCAGTCCTGCCTTGGTGCTCCACTGAGGGACGCTTCGGAGTTAACCACCGTGCACTTGTTCCCGACG CTGCGCGCTCAGGCCTCTGGGATTAGTAGTTTTAGCCTCGTGGATGGCGGGGCGCCTCGCGAAGATGGTGGCGCG ACACCACCGGGTCCCTGACCCCGCGCCCCCGCGCCCGGTTCCCGGCATGCCTCGCGCCCGTAAGGGCAACACG CTCCGGAAGGGTGGTCAGCGCCGTGGAGGAGGTGCCCGGAGCAGTGCCCAAGCTGACTCGGGTTCCAGTGACGAT GAGGCAGCCAGTGAGGCCCGCAGCACCGCCAGTGAATGCCCCAGCCTTCTCAGCACCACTGCAGAGGACAGCCTT GGGGGGGATGTCGTGGATGAGCAGGGCCAGCAGGAAGACCTTGAGGAAAAGCTGAAGGAGTATGTGGACTGTCTC ACAGACAAGAGTGCCAAGACCCGGCAGGGTGCTCTTGAGAGCCTGCGCCTGGCCCTAGCGTCCCGCCTACTCCCC GACTTCTTGCTGGAGCGCCGCCTCACGCTAGCCGATGCCCTGGAAAAGTGCCTCAAGAAAGGGAAGGGCGAGGAA CAAGCCCTGGCTGCTGCTGCTGCGCCTGCTCTGCGTGCAGCTGGGCCCTGGACCTAAGGGTGAGGAGCTGTTT CACAGCCTGCAGCCTCTGCTGGTCTCTGTGCTCAGTGACAGCACAGCTAGCCCTGCTGCCCGGCTCCACTGTGCT TCTGCCCTTGGCCTGGGCTGCTGCCGCTGACATCCAGGACCTGGTCTCTTGCCTTGCCTTAGAA AGTGTTTTCAGCCGGTTCTATGGCTTGGGGGGGCAGCTCCACAAGTCCTGTGGTTCCTGCCAGCCTGCACGGCCTG CTCTCTGCTGCCCTGCAGGCCTGGGCATTGCTGCTCACCATCTGCCCTAGCACCCAAATCAGCCACATCCTTGAC AGGCAGCTGCCCCGGCTGCCCCAGCTCTTGTCCAGTGAAAGTGTGAACCTGCGGATCGCTGCCGGTGAAACCATT CTGCGCACTCTGGCCACTGACAGTAACAAGTACCGTGCCAAGGCTGATCGTCGGCGCCAGCGCTCTACTTTCCGC GCCGTGCTGCACTCCGTGGAGGGCGGTGAATGCGAAGAAGAGATAGTGCGCTTCGGCTTTGAGGTGCTCTACATG GACAGCTGGGCTCGGCACCGGATCTACGCTGCCTTCAAGGAAGTGCTGGGTTCGGGCATGCACCACCACCTCCAG AACAATGAGCTACTCCGTGACATCTTTGGCCTGGGCCCTGTGCTGTTGCTGGATGCCACTGCCCTGAAGGCCTGC AAGGTTCCACGCTTTGAGAAGCACCTGTACAATGCTGCTTCCAAAGCCCGGACCAAGGCTCGAAGCCGTGTG $\tt CGGGACAAGCGGGCAGACATCCTG{\color{red}{\textbf{TGA}}} AGCAGGACCTGCTGAAGAGGAGACTTTCTATGCCCTTGGTCCGTATTT$ TTAACAGAAGACAGTGCAACAACTGGTCTCCACCAGTATTTGTCACTTTATTTTTTTAATGACAAAACCAAAAA TTCCCTTCCTTTCTCAGGCCTTGCTCCCCCAGGATGACCCACTCTTAGGGGGGGTGGTGGCATCTGGACAA ATGCCACCACAGCAGGTGGGGTGGCAAAGCTACCTGGAATGGATTTGTGTGCTGATTTTTAAGGATTATTACAGA

PCT/US2003/028547

FIGURE 1152

MGPKKSWRSHFFPLPEVWLLLLLSQALSPSHGPQTQAGVGLVWSVPLPSALRSQSCLGAPLRDASELTTVHLFPT RGWGARRALWVHSSASASSAASRRLRAQASGISSFSLVDGGAPREDGGARGVWLPSSGQVSAQRTGRRLVGLEP TPTGSLTPRPPRPVPGMPRARKGNTLRKGGQRRGGGARSSAQADSGSSDDEAASEARSTASECPSLLSTTAEDSL GGDVVDEQGQQEDLEEKLKEYVDCLTDKSAKTRQGALESLRLALASRLLPDFLLERRLTLADALEKCLKKGKGEE QALAAAVLGLLCVQLGPGPKGEELFHSLQPLLVSVLSDSTASPAARLHCASALGLGCYVAAADIQDLVSCLACLE SVFSRFYGLGGSSTSPVVPASLHGLLSAALQAWALLLTICPSTQISHILDRQLPRLPQLLSSESVNLRIAAGETI ALLFELARDLEEEFVYEDMEALCSVLRTLATDSNKYRAKADRRQRSTFRAVLHSVEGGECEEEIVRFGFEVLYM DSWARHRIYAAFKEVLGSGMHHHLQNNELLRDIFGLGPVLLLDATALKACKVPRFEKHLYNAAAFKARTKARSRV RDKRADIL

PCT/US2003/028547

FIGURE 1153

TGCGGCCGCGTTTCCGTGGAGACAGCCGAGCCTGCGGAAGGCGGCGGCGGCGCGCACCTGCGATCAGCGGCTGGGGCAGGTTATGGTAGTGCGGACTGCGGTGTGAGCAGAGCGGCCACGGGGCCCATGCGCCGGCGGCCCTGAC<u>ATG</u>

GGCGCCAGCGGGTCCAAAGCTCGGGGCCTGTGGCCCTTCGCCTCGGCGGCGGAGGCGGCGGCTCAGAGGCAGCA GGAGCTGAGCAAGCTTTGGTGCGGCCTCGGGGCCGAGCTGTGCCCCCCTTCGTATTCACGCGCCGCGGCTCTATG TTCTATGATGAGGATGGGGATCTGGCTCACGAGTTCTATGAGGAGACAATCGTCACCAAGAACGGGCAGAAGCGG GCCAAGCTGAGGCGAGTGCATAAGAATCTGATTCCTCAGGGCATCGTGAAGCTGGATCACCCCCGCATCCACGTG GATTTCCCTGTGATCCTCTATGAGGTG<u>TGA</u>CCCTGGGAGGTGGCAGACAGAAGCACCCCCTGCCCCGGCAAGAAA CTCCCAGGCTCAATCAAGGTGTGGCTTCCATTGAGGAGCCCAGGCTGGGGCCACAACCCTGAATAAACTCTGTTG GGTTGGTGGGTGAAGGCTAATGGCAGAGTTAGCACCCCACTCTCCCAAGCCACCCCTGCAAGCAGCATAGCA GGGCATATACCAGTCAGGAATGCCCGTTACCTGGTTCCTTGCCTGGTCTGCTTTCTTCCAAGTTTGCCTGGGGCC TAGCCCTGCTAGAGGCTACAGCACTTTACAAGCAAGGTATGCTTTCTTCCAGCCCCTAGGCTGTGGGCACTGTAT ACAAGTAGGAACTTCCTTTCCTTCACTTCCCTTTTAACCCCTAGTCAGAGCATTTCAGCCGTTTGCTACCTCGAT TCAGATGGATGGACAGTITGCTGGCTATTGATAGGAGTGGGGACTGGGTGGGGGCTTCTCCCTCTACCCAGGGCT GGGCTGATCCCCCTACTGCAACTGATGCCCCCCAACCCCGAACCCCCAGTTGAGGAGTTGAGAGAGTGCAG GCTGGGGTCAGGACAGGCTGCGGATGCTTGTGCCTATGGGGAGTTACTCCAACCCACCTATTCTGTCTAATCTCC CTAAGGCTGGTGCCAGTAGTTATGAGTAGCCTACCACCCCTTCCCTTACAGTAACCCCCACCCCTTCAGGATCAG TCAAGGGAAAGCACTAGAACCCCTGGGTAGGGAAAGAAGGAGGGGAAAAACCATAAAAGGAATACTTATAATGTG CTGTGCAAGCTCTGTGCTTCTATAATGTGGGAAATGGCTTGGGGAGGATGGCCCCTAGCTTAGGAAGACTGTTGT GTTATTTGTTCAATTCAATAAAATGATTTGTAGATCCTGC

PCT/US2003/028547

1240/6881 FIGURE 1154

 ${\tt MGASGSKARGLWPFASAAGGGGSEAAGAEQALVRPRGRAVPPFVFTRRGSMFYDEDGDLAHEFYEETIVTKNGQKRAKLRRVHKNLIPQGIVKLDHPRIHVDFPVILYEV}$

PCT/US2003/028547

FIGURE 1155

GGCACGAGGCTGCGGCCAGCTCCCGCGACCGCCTCTCCTGCCCGCTACCTCAGCAAGGTGCCACTA GTACGCAGTGACCGACGACTACCAGTTGTCCAAGCAGGTGCTGGGCCTGGGTGTGAACGGCAAAGTGCTGGAGTG CTTCCATCGGCGCACTGGACAGAGTGTGCCCTGAAGCTCCTGTATGACAGCCCCAAGGCCCGGCAGGAGGTAGA CCATCACTGGCAGGCTTCTGGCGGCCCCCATATTGTCTGCATCCTGGATGTATGAGAACATGCACCATGGCAA GCGCTGTCTCCTCATCATCATGGAATGCATGGAAGGTGGTGAGTTGTTCAGCAGGATTCAGGAGCGTGGCGACCA GGCTTTCACTGAGAGAGAGAGCTGCAGAGATAATGCGGGATATTGGCACTGCCATCCAGTTTCTGCACAGCCATAA CATTGCCCACCGAGATGTCAAGCCTGAAAACCTACTCTACACATCTAAGGAGAAAGACGCAGTGCTTAAGCTCAC CGATTTTGGCTTTGCTAAGGAGACCACCCAAAATGCCCTGCAGACACCCTGCTATACTCCCTATTATGTGGCCCC TGAGGTCCTGGGTCCAGAGAAGTATGACAAGTCATGTGACATGTGGTCCCTGGGTGTCATCATGTACATCCTCCT TTGTGGCTTCCCACCCTTCTACTCCAACACGGGCCAGGCCATCTCCCCGGGGATGAAGAGGAGGATTCGCCTGGG CCAGTACGGCTTCCCCAATCCTGAGTGGTCAGAAGTCTCTGAGGATGCCAAGCAGCTGATCCGCCTCCTGTTGAA GACAGACCCCACAGAGAGGCTGACCATCACTCAGTTCATGAACCACCCCTGGATCAACCAATCGATGGTAGTGCC ACAGACCCCACTCCACACGGCCCGAGTGCTGCAGGAGGACAAAGACCACTGGGACGAAGTCAAGGAGGAGATGAC CAGTGCCTTGGCCACTATGCGGGTAGACTACGACCAGGTGAAGATCAAGGACCTGAAGACCTCTAACAACCGGCT $\tt CCTCAACAAGAGGAGAAAAAAGCAGGCAGGCAGCTCCTCTGCCTCACAGGGCTGCAACAACCAG{\color{red}{TAG}C} {\color{blue}{TAG}C} {\color{blue}{TA$ GCCTTGGAGGAGCCTGGCCTCTCAGCCTGCATAACAGACTGAAATGTGCTCAGGCCCTGGCCAGGAGGGCCCCAGG GTCATTCTTTTAACAAAAGGATTATTTTGTTGTGTTTTAATTTGTCACTCGGAACTTCAGGATGGAGGACCCTGA TGCTGCCATAGCAGCACCTTTAGCTAGGTTGGCCCGAGTGAGGCCTCTGTGCTGTCCTGCCCTGGTGCATGGCCT TAGCTTTCTAGGCCACTGGGAGTTGTGGCTGGGCTTCCCATCTTCCACAGAGACATCTCCCTGTGGGATGGGCAG ATGGGCCTGGCCTTGAGAAAGGCATTGGCCATTGCTTGCCATGGTGACCAGGGACCACGTTGCTGCCTGTGAATG $\tt CTGAGTGAGCGAGTAAGGGAGGGGGGGGGGTTGAGGGTTCACCTCTGCCTTGGGGAGGCTGATTTCTCACACACT$ CCAGCCCTGCCTTGCTGCAGCCCCAGCCCAGATGGCACTCAGCGCTCTCCCCTGAGGGAGTCCCTGGGCCTAGCC CACTTTGGAAAATGTCACTGTGACAAAAGCCAGCATACTTTCCCTGCACCCATCTGCTCACCAGATCTCAGGCAG GAAAGCCCCTCTCTGTTGAAGTCAGGGGCTATCTTTTGGTATACTTGTGTGAAAGTGGCTGGTTGGGAGCAGAGC TAAGTGGCTTCCCATTAACCTGAGGTCTCTTTCTTTACTCTGGGTCAGACCTGAGGTTGGGGGAAGGCGACTGAGC CATGCTCAGAATGTCTGGTCCTGGCTTGGGCCTGAGTAGGGCAGAGAGGGCCTTTCATGGCTGATCAGAGCTTAC CAGCCCCACCCACCATGGTAGCCTTAGGGTGCTGAGTGCCTGATACTGCCTGACAAGTGCCTGACACGCAGCCT AGTTCCTTCCTGGCCCCTCTCACTGGCTGGGAAACCCTAGACCATGTCAGATAGGACAACACTGCTGGGTTTT ACATCCAGATAGTAATAAACACCATTTCATCATT

PCT/US2003/028547

FIGURE 1156

MDGETAEEQGGPVPPPVAPGGPGLGGAPGGRREPKKYAVTDDYQLSKQVLGLGVNGKVLECFHRRTGQKCALKLL YDSPKARQEVDHHWQASGGPHIVCILDVYENMHHGKRCLLIIMECMEGGELFSRIQERGDQAFTEREAAEIMRDI GTAIQFLHSHNIAHRDVKPENLLYTSKEKDAVLKLTDFGFAKETTQNALQTPCYTPYYVAPEVLGPEKYDKSCDM WSLGVIMYILLCGFPPFYSNTGQAISPGMKRRIRLGQYGFPNPEWSEVSEDAKQLIRLLLKTDPTERLTITQFMN HPWINQSMVVPQTPLHTARVLQEDKDHWDEVKEEMTSALATMRVDYDQVKIKDLKTSNNRLLNKRRKKQAGSSSA SQGCNNQ

PCT/US2003/028547

1243/6881 FIGURE 1157

GGCGGCATTTCCTGGTGTCTGAGCCTGGCGCGGAGGCT<u>ATC</u>GGCAGCCAGGAGGTGCTGGGCCACGCGGCCCGGC TGGCCTCCTCCGGTCTCCTCCAGGTGTTGTTTCGGTTGATCACCTTTGTCTTGAATGCATTTATTCTTCGCT TCCTGTCAAAGGAAATCGTTGGCGTAGTAAATGTAAGACTAACGCTGCTTTACTCAACCACCCTCTTCCTGGCCA GAGAGGCCTTCCGCAGAGCATGTCTCAGTGGGGGCACCCAGCGAGACTGGAGCCAGACCCTCAACCTGCTGTGGC TAACAGTCCCCCTGGGTGTGTTTTGGTCCTTATTCCTGGGCTGGATCTGGTTGCAGCTGCTTGAAGTGCCTGATC CTAATGTTGTCCCTCACTATGCAACTGGAGTGGTGCTGTTTGGTCTCTCGGCAGTGGTGGAGCTTCTAGGAGAGC CCTTTTGGGTCTTGGCACAAGCACATATGTTTGTGAAGCTCAAGGTGATTGCAGAGAGCCTGTCGGTAATTCTTA AGAGCGTTCTGACAGCTTTTCTCGTGCTGTGGTTGCCTCACTGGGGATTGTACATTTTCTCTTTGGCCCAGCTTT TTCAAACTCTTCCTGTCTCCAGAATAACAGATCTGTTACCCAATATTACAAGAAATGGAGCGTTTATAAACTGGA TGATGACATTTTTGAATGTATTGAACTTTGGTGATCAGGGTGTGTATGATATAGTGAATAATCTTGGCTCCCTTG TGGCCAGATTAATTTTCCAGCCAATAGAGGAAAGTTTTTATATATTTTTTTGCTAAGGTGCTGGAGAGGGGAAAGG ATGCCACACTTCAGAAGCAGGACGTTGCTGTGGCTGCTGCAGTCTTGGAGTCCCTGCTCAAGCTGGCCCTGC TGGCCGGCCTGACCATCACTGTTTTTGGCTTTGCCTATTCTCAGCTGGCTCTGGATATCTACGGAGGGACCATGC TTAGCTCAGGATCCGGTCCTGTTTTGCTGCGTTCCTACTGTCTCTATGTTCTCCTGCTTGCCATCAATGGAGTGA CAGAGTGTTTCACATTTGCTGCCATGAGCAAAGAGGAGGTCGACAGGTACAATTTTGTGATGCTGGCCCTGTCCT CCTCATTCCTGGTGTTATCCTATCTCTTGACCCGTTGGTGTGGCAGCGTGGGCTTCATCTTGGCCAACTGCTTTA ACATGGGCATTCGGATCACGCAGAGCCTTTGCTTCATCCACCGCTACTACCGAAGGAGCCCCCACAGGCCCCTGG CTGGCCTGCACCTATCGCCAGTCCTGCTCGGGACATTTGCCCTCAGTGGTGGGGTTACTGCTGTTTCGGAGGTAT TCGGGACAGCATTCCTCACAGAGACCAAGCTGATCCATTTCCTCAGGACTCAGTTAGGTGTGCCCAGACGCACTG ACACATTCTGTGTAAGAGCCCCACTGAGGGCTCTGCAGCGGAGTGACAGCAACCCCAAAGATGAGGCACCAGAGA

WO 2004/030615 PCT/US2003/028547

FIGURE 1158

MGSQEVLGHAARLASSGLLLQVLFRLITFVLNAFILRFLSKEIVGVVNVRLTLLYSTTLFLAREAFRRACLSGGT QRDWSQTLNLLWLTVPLGVFWSLFLGWIWLQLLEVPDPNVVPHYATGVVLFGLSAVVELLGEPFWVLAQAHMFVK LKVIAESLSVILKSVLTAFLVLWLPHWGLYIFSLAQLFYTTVLVLCYVIYFTKLLGSPESTKLQTLPVSRITDLL PNITRNGAFINWKEAKLTWSFFKQSFLKQILTEGERYVMTFLNVLNFGDQGVYDIVNNLGSLVARLIFQPIEESF YIFFAKVLERGKDATLQKQEDVAVAAAVLESLLKLALLAGLTITVFGFAYSQLALDIYGGTMLSSGSGPVLLRSY CLYVLLLAINGVTECFTFAAMSKEEVDRYNFVMLALSSSFLVLSYLLTRWCGSVGFILANCFNMGIRITQSLCFI HRYYRRSPHRPLAGLHLSPVLLGTFALSGGVTAVSEVFLCCEQGWPARLAHIAVGAFCLGATLGTAFLTETKLIH FLRTQLGVPRRTDKMT

PCT/US2003/028547

1245/6881 FIGURE 1159

ATGGAGAGCTACCACAAGCCTGACCAGCAGAAGCTGCAGGCCTTGAAGGACACGGCCAACCGCCTACGTATCAGC TCCATCCAGGCCACCACTGCGGCGGGCTCTGGCCACCCCACGTCATGCTGCAGCGCCGCAGAGATCATGGCTGTC CTCTTTTTCCACACCATGCGCTACAAGTCCCAGGACCCCCGGAATCCGCACAATGACCGCTTTGTGCTCTCCAAG GGCCATGCAGCTCCCATCCTCTACGCGGTCTGGGCTGAAGCTGGTTTCCTGGCCGAGGCGGAGCTGCTGAACCTG AGGAAGATCAGCTCCGACTTGGACGGGCACCCGGTCCCGAAACAAGCTTTCACCGACGTGGCCACTGGCTCCCTG GGCCAGGGCCTCGGGGCCGCTTGTGGGATGGCCTACACCGGCAAATACTTCGACAAGGCCAGCTACCGAGTCTAT TGCTTGCTGGGAGACGGGGAGCTGTCAGAGGGCTCTGTATGGGAGGCCATGGCCTTCGCCAGCATCTATAAGCTG GACAACCTCGTGGCCATTCTAGACATCAATCGCCTGGGCCAGAGTGACCCGGCCCCTCTGCAGCACCAGATGGAC AAGGCCTTTGGCCAGGCCAAGCACCAGCCAACAGCCATCATTGCCAAGACCTTCAAGGGCCGAGGGATCACGGGG GTAGAAGATAAGGAGTCTTGGCATGGGAAGCCCCTCCCCAAAAACATGGCTGAGCAGATCATCCAGGAGATCTAC AGCCAGATCCAGAGCAAAAAGAAGATCCTGGCAACCCCTCCACAGGAGGACGCACCCTCAGTGGACATTGCCAAC GCCAAGCTGGGCCATGCCAGTGACCGCATCATCGCCCTGGATGGGGACACCAAAAATTCCACCTTCTCGGAGATC TTCAAAAAGGAGCACCCGGACCGCTTCATCGAGTGCTACATTGCTGAGCAGAACATGGTGAGCATCGCGGTGGGC TGTGCCACCCGCAACAGGACGGTGCCCTTCTGCAGCACTTTTGCAGCCTTCTTCACGCGGGCCTTTGACCAGATT CGCATGGCCGCCATCTCCGAGAGCAACATTAACCTCTGCGGCTCCCACTGCGGCGTTTCCATCGGGGAAGACGGG CCCTCCCAGATGGCCCTAGAAGATCTGGCTATGTTTCGGTCAGTCCCCACATCAACTGTCTTTTACCCAAGTGAT GGCGTTGCTACAGAGAAGGCAGTGGAACTAGCCGCCAATACAAAGGGTATCTGCTTCATCCGGACCAGCCGCCCA GAAAATGCCATCATCTATAACAACAATGAGGACTTCCAGGTCGGACAAGCCAAGGTGGTCCTGAAGAGCAAGGAT AAGATCAACATCCGCGTGCTGGACCCCTTCACCATCAAGCCCCTGGACAGAAAACTCATTCTCGACAGCGCTCGT GCCACCAAGGGCAGGATCCTCACCGTGGAGGACCATTATTATGAAGGTGGCATTGGTGAGGCTGTGTCCAGTGCA GTAGTGGGCGAGCCTGGCATCACTGTCACCCACCTGGCAGTTAACCGGGTACCAAGAAGTGGGAAGCCGGCTGAG GGGTATGAAGTGTGGGGCGGGGGTCTATACATTCCTGAGATTCTGGGAAAGGTGCTCAAAGATGTACTGAGAGGA AAAAAAAAAAA

PCT/US2003/028547

FIGURE 1160

MESYHKPDQQKLQALKDTANRLRISSIQATTAAGSGHPTSCCSAAEIMAVLFFHTMRYKSQDPRNPHNDRFVLSK GHAAPILYAVWAEAGFLAEAELLNLRKISSDLDGHPVPKQAFTDVATGSLGQGLGAACGMAYTGKYFDKASYRVY CLLGDGELSEGSVWEAMAFASIYKLDNLVAILDINRLGQSDPAPLQHQMDIYQKRCEAFGWHAIIVDGHSVEELC KAFGQAKHQPTAIIAKTFKGRGITGVEDKESWHGKPLPKNMAEQIIQEIYSQIQSKKKILATPPQEDAPSVDIAN IRMPSLPSYKVGDKIATRKAYGQALAKLGHASDRIIALDGDTKNSTFSEIFKKEHPDRFIECYIAEQNMVSIAVG CATRNRTVPFCSTFAAFFTRAFDQIRMAAISESNINLCGSHCGVSIGEDGPSQMALEDLAMFRSVPTSTVFYPSD GVATEKAVELAANTKGICFIRTSRPENAIIYNNNEDFQVGQAKVVLKSKDDQVTVIGAGVTLHEALAAAELLKKE KINIRVLDPFTIKPLDRKLILDSARATKGRILTVEDHYYEGGIGEAVSSAVVGEPGITVTHLAVNRVPRSGKPAE LLKMFGIDRDAIAQAVRGLITKA

PCT/US2003/028547

1247/6881 FIGURE 1161

AGAAGCCTCCTGGCAGACACTGGAGCCACGATGAAGCCCCCAAGGCCTGTCCGTACCTGCAGCAAAGTTCTCGTC CTGCTTTCACTGCTGGCCATCCACCAGACTACTACTGCCGAAAAGAATGGCATCGACATCTACAGCCTCACCGTG GACTCCAGGGTCTCATCCCGATTTGCCCACACGGTCGTCACCAGCCGAGTGGTCAATAGGGCCAATACTGTGCAG GAGGCCACCTTCCAGATGGAGCTGCCCAAGAAAGCCTTCATCACCAACTTCTCCATGATCATCGATGGCATGACC TACCCAGGGATCATCAAGGAGAAGGCTGAAGCCCAGGCACAGTACAGCGCAGCAGTGGCCAAGGGAAAGAGCGCT GGCCTCGTCAAGGCCACCGGGAGAAACATGGAGCAGTTCCAGGTGTCGGTCAGTGTGGCTCCCAATGCCAAGATC ACCTTTGAGCTGGTCTATGAGGAGCTGCTCAAGCGGCGTTTGGGGGGTGTACGAGCTGCTGCAAAAGTGCGGCCC CAGCAGCTGGTCAAGCACCTGCAGATGGACATTCACATCTTCGAGCCCCAGGGCATCAGCTTTCTGGAGACAGAG AGCACCTTCATGACCAACCAGCTGGTAGACGCCCTCACCACCTGGCAGAATAAGACCAAGGCTCACATCCGGTTC AAGCCAACACTTTCCCAGCAGCAAAAGTCCCCAGAGCAGCAAGAACAGTCCTGGACGCAACCTCATTATCCGC TATGATGTGGACCGGGCCATCTCCGGGGGCTCCATTCAGATCGAGAACGGCTACTTTGTACACTACTTTGCCCCC GAGGGCCTAACCACAATGCCCAAGAATGTGGTCTTTGTCATTGACAAGAGCGGCTCCATGAGTGGCAGGAAAATC CAGCAGACCCGGGAAGCCCTAATCAAGATCCTGGATGACCTCAGCCCCAGAGACCAGTTCAACCTCATCGTCTTC AGTACAGAAGCAACTCAGTGGAGGCCATCACTGGTGCCAGCCTCAGCCGAGAACGTGAACAAGGCCAGGAGCTTT GCTGCGGGCATCCAGGCCCTGGGAGGGACCAACATCAATGATGCAATGCTGATGCTGTGCAGTTGCTGGACAGC GGGGAGACTAACCCCAGGAGCATCCAGAATAACGTGCGGGAAGCTGTAAGTGGCCGGTACAGCCTCTTCTGCCTG GGCTTCGGTTTCGACGTCAGCTATGCCTTCCTGGAGAAGCTGGCACTGGACAATGGCGGCCTGGCCCGGCCATC CATGAGGACTCAGACTCTGCCCTGCAGCTCCAGGACTTCTACCAGGAAGTGGCCAACCCACTGCTGACAGCAGTG ACCTTCGAGTACCCAAGCAATGCCGTGGAGGAGGTCACTCAGAACAACTTCCGGCTCCTCTTCAAGGGCTCAGAG CAGAACATCACTTTCCAAACGGAGTCCAGTGTGGCAGAGCAGGAGGCGGAGTTCCAGAGCCCCAAGTATATCTTC CACAACTTCATGGAGAGGCTCTGGGCATACCTGACTATCCAGCAGCTGCTGGAGCAAACTGTCTCCGCATCCGAT GCTGATCAGCAGGCCCTCCGGAACCAAGCGCTGAATTTATCACTTGCCTACAGCTTTGTCACGCCTCTCACATCT ATGGTAGTCACCAAACCCGATGACCAAGAGCAGTCTCAAGTTGCTGAGAAGCCCCATGGAAGGCGAAAGTAGAAAC AGGAATGTCCACTCAGGTTCCACTTTCTTCAAATATTATCTCCAGGGAGCAAAAATACCAAAACCAGAGGCTTCC TTTTCTCCAAGAAGAGGATGGAATAGACAAGCTGGAGCTGCTGGCTCCCGGATGAATTTCAGACCTGGGGTTCTC AGCTCCAGGCAACTTGGACTCCCAGGACCTCCTGATGTTCCTGACCATGCTGCTTACCACCCCTTCCGCCGTCTG GCCATCTTGCCTGCTTCAGCACCACCAGCCACCTCAAATCCTGATCCAGCTGTGTCTCGTGTCATGAATATGAAA ATCGAAGAACAACCATGACAACCCAAACCCCAGCCCCCATACAGGCTCCCTCTGCCATCCTGCCACTGCCTGGG CAGAGTGTGGAGCGGCTCTGTGTGGACCCCAGACACCGCCAGGGGCCAGTGAACCTGCTCTCAGACCTGAGCAA GGGGTTGAGGTGACTGGCCAGTATGAGAGGGAGAAGGCTGGGTTCTCATGGATCGAAGTGACCTTCAAGAACCCC CTGGTATGGGTTCACGCATCCCCTGAACACGTGGTGGTGACTCGGAACCGAAGAAGCTCTGCGTACAAGTGGAAG GAGACGCTATTCTCAGTGATGCCCGGCCTGAAGATGACCATGGACAAGACGGGTCTCCTGCTGCTCAGTGACCCA GACAAAGTGACCATCGGCCTGTTGTTCTGGGATGGCCGTGGGGAGGGGCTCCGGCTCCTTCTGCGTGACACTGAC CGCTTCTCCAGCCACGTTGGAGGGACCCTTGGCCAGTTTTACCAGGAGGTGCTCTGGGGATCTCCAGCAGCATCA GATGACGCAGACGCACGCTGAGGGTTCAGGGCAATGACCACTCTGCCACCAGAGAGCGCAGGCTGGATTACCAG GAGGGGCCCCGGGAGTGGAGATTTCCTGCTGGTCTGTGGAGCTGTAGTTCTGATGGAAGGAGCTGTGCCCACCC TGTACACTTGGCTTCCCCCTGCAACTGCAGGGCCGCTTCTGGGGCCTGGACCACCATGGGGAAGAAGAGTCCCAC TCATTACAAATAAAGAAAGGTGGTGTGAGCCTGGG

PCT/US2003/028547

1248/6881 FIGURE 1162

GCGGCAGCGTAAGTGCGTGACGCTCAGTGGCTTCAGTTCACACGTGGCGCCAGCGGAGGCAGGTTGATGTGT GGTATAAAATCCAAAAAAAGGTTCGAGAACATCATCGAAAATTAAGAAAGGAGGCTAAAAAAGCGGGGTCACAAGA AGCCTAGGAAAGACCCAGGAGTTCCAAACAGTGCTCCCTTTAAGGAGGCTCTTCTTAGGGAAGCTGAGCTAAGGA AACAGAGGCTTGAAGAACTAAAACAGCAGCAGAAACTTGACAGGCAGAAGGAACTAGAAAAAGAAAACTTG AAACTAATCCTGATATTAAGCCATCAAATGTGGAACCTATGGAAAAGGAGTTTGGGCTTTGCAAAACTGAGAACA AAGCCAAGTCGGGCAAACAGAATTCAAAGAAGCTGTACTGCCAAGAACTTAAAAAAGGTGATTGAAGCCTCCGATG TTGTCCTAGAGGTGTTGGATGCCAGAGATCCTCTTGGTTGCAGATGTCCTCAGGTAGAAGAGGCCATTGTCCAGA GTGGACAGAAAAGCTGGTACTTATATTAAATAAATCAGATCTGGTACCAAAGGAGAATTTGGAGAGCTGGCTAA ATTATTTGAAGAAAGAATTGCCAACAGTGGTGTTCAGAGCCTCAACAAAACCAAAGGATAAAGGGAAGATAACCA AGCGTGTGAAGGCAAAGAAGAATGCTGCTCCATTCAGAAGTGAAGTCTGCTTTGGGAAAGAGGGCCTTTGGAAAC TTCTTGGAGGTTTTCAGGAAACTTGCAGCAAAGCCATTCGGGTTGGAGTAATTGGTTTCCCAAATGTGGGGAAAA GCAGCATTATCAATAGCTTAAAACAAGAACAGATGTGTAATGTTGGTGTATCCATGGGGCTTACAAGGAGCATGC CTGCGCTTGCTCTGCGAAGTCCAGCAAGTATTGAAGTAGTAAAACCGATGGAGGCTGCCAGTGCCATCCTTTCCC AGGCTGATGCTCGACAGGTAGTACTGAAATATACTGTCCCAGGCTACAGGAATTCTCTGGAAATTTTTACTGTGC TTGCTCAGAGAAGAGGTATGCACCAAAAAGGTGGAATCCCAAATGTTGAAGGTGCTGCCAAACTGCTGTGGTCTG AGTGGACAGGTGCCTCATTAGCTTACTATTGCCATCCCCCTACATCTTGGACTCCTCCATATTTTAATGAGA GTATTGTGGTAGACATGAAAAGCGGCTTCAATCTGGAAGAACTGGAAAAGAACAATGCACAGAGCATAAGAGCCA TCAAGGGCCCTCATTTGGCCAATAGCATCCTTTTCCAGTCTTCCGGTCTGACAAATGGAATAATAGAAGAAAAGG AAACTGTTGATGAAGAAGTTGATGAAAACAGCTCAGGCATGTTTGCTGCAGAAGAGACAGGGGAGGCACTGTCTG AGGAGACTACAGCAGGTGAACAGTCTACAAGGTCTTTTATCTTGGATAAAATCATTGAAGAGGATGATGCTTATG AACTGTTCTCTGTATAAGTTATGGTATGCATGAGCTGTGTAAATTTTGTGAATATGTATTATATAAAACCAGGC AACTTGGAATCCCTAAATTCTGTAAAAAGACAATTCATCTCATTGTGAGTGGAAGTAGTTATCTGGAATAAAAAA **AGAAGATACCTATTG**

WO 2004/030615 PCT/US2003/028547

FIGURE 1163A

 ${\tt ACTCTGTCCTGGACAGCGTGCCCACCAGCC} \underline{{\tt ATG}} {\tt GCGGGGCCCCGGGGCCTCCTCCCACTCTGCCTCCTGGCCTTC}$ TGCCTGGCAGGCTTCAGCTTCGTCAGGGGGGCAGGTGCTGTTCAAAGGCTGTGATGTGAAAACCACGTTTGTCACT CATGTACCCTGCACCTCGTGCGCGGCCATCAAGAAGCAGACGTGTCCCTCAGGCTGCCGGGAGCTCCCGGAT CAGATAACCCAGGACTGCCGCTACGAAGTACAGCTGGGGGGCTCTATGGTGTCCATGAGCGGCTGCAGACGGAAG TGCCGGAAGCAAGTGGTGCAGAAGGCCTGCTGCCTGGCTACTGGGGTTCCCGGTGCCATGAATGCCCTGGGGGC TGTGTGCACGGAGTGTGCAACCATGGGCCACGTGGGGATGGAAGCTGCCTGTGCTTTGCTGGATACACTGGCCCC CACTGTGATCAAGAGCTGCCCGTCTGCCAGGAGCTGCGCTGTCCCCAGAACACCCCAGTGCTCCGCAGAGGCTCCC AGCTGCAGGTGCCTGCCCGGCTACACACAGCAGGGCAGTGAATGCCGAGCCCCCAACCCCTGCTGGCCATCACCC TGCTCACTGCCCAGTGCTCGGTGAGCCCCAAGGGGCAGGCTCAGTGTCACTGCCCTGAGAACTACCATGGC GATGGGATGGTGTGTCTGCCCAAGGACCCATGCACTGACAACCTTGGTGGCTGCCCCAGCAACTCTACTTTGTGT GTGTACCAGAAGCCGGGCCAGGCCTTCTGCACCTGCCGGCCAGGCCTGGTCAGCATCAACAGCAACGCTTCTGCG GGCTGCTTCGCCTTCTCCCCCCTTCTCCTGCGACCGGTCTGCCACTTGCCAGGTGACCGCTGATGGGAAGACC GCCACGCAGACAGGCCGGGTGTTCCTGCAGCTGAGGGTCGCCGTGGCCATGATGGACCAGGGCTGCCGGGAAATC CTTACCACAGCGGGCCCTTTCACCGTGCTGGTGCCATCCGTCTCCTCCTCCTCCAGGACCATGAATGCATCC CGAAGGTGGTGGACGCTGGCCGGGCAGGAGATCACCGTCACCTTTAACCAATTCACGAAATACTCCTACAAGTAC AAAGACCAGCCCAGCAGACGTTCAACATCTACAAGGCCAACAACATAGCAGCTAATGGCGTCTTCCACGTGGTC ACTGGCCTGCGGTGGCAGGCCCCTCTGGGACCCCTGGGGATCCCAAGAGAACTATCGGACAGATCCTCGCCTCT TTCACAGTCTTTGCCCCAAGCAATGAGGCTGTGGACAGCTTGCGTGACGGCCGCCTGATCTACCTCTTCACAGCG GGTCTCTCTAAACTGCAGGAGTTGGTGCGGTACCACATCTACAACCACGGCCAGCTGACCGTTGAGAAGCTCATC TCCAAGGGTCGGATCCTCACCATGGCGAACCAGGTCCTGGCTGTGAACATTTCTGAGGAGGGGCGCATCCTGCTG GGACCCGAGGGGGTCCCGCTGCAGAGGGTAGACGTGATGGCCGCCAATGGTGTGATCCACATGCTGGACGGCATC CTGCTGCCCCGACCATCCTGCCCATCCTGCCCAAGCACTGCAGCGAGGAGCACCACAAGATTGTGGCGGGCTCC TGTGTGGACTGCCAAGCCCTGAACACCAGCACGTGTCCCCCCAACAGTGTGAAGCTGGACATCTTCCCCAAGGAG TGTGTCTACATCCATGACCCAACGGGGCTCAATGTGCTAAAGAAGGGCTGTGCCAGCTACTGCAACCAAACCATC ${\tt ATGGAACAAGGCTGCTGCAAAGGTTTTTCGGGCCTGACTGCACGCAGTGTCCTGGGGGCTTCTCCAACCCCTGC}$ GCCTGCCACATCTGCTCGAACCCAAACAAGCATGGAGAGCAATGCCAGGAAGACTGCGGCTGTGTCCATGGTCTC TGCGACAACCGCCCAGGCAGTGGGGGGGTGTGCCAGCAGGGCACGTGTGCCCCTGGCTTCAGTGGCCGGTTCTGC AACGAGTCCATGGGGGACTGTGGGCCCACAGGGCTGGCCCAGCACTGCCACCTGCATGCCCGCTGTTTAGCCAG GAGGGTGTTGCCAGATGTCGCTGTCTTGATGGCTTTGAGGGTGATGGCTTCTCCTGCACACCCTAGCAACCCCTGC TGCCACAAAGGCTGGAGTGGGGATGGCCGCGTCTGTGTGGCTATTGACGAGTGTGAGCTGGACATGAGAGGTGGC TGCCACACCGATGCCCTCTGCAGCTATGTGGGCCCCGGGCAGAGCCGATGCACCTGCAAGCTGGGCTTTGCCGGG GCAGTGGGGGGGGGCCAGGGGTCTGCACGTGCCCCCTGGCTTTGGGGGGTGATGGCTTCAGCTGTTATGGAGAC ATCTTCCGGGAGCTGGAGGCAAATGCCCACTTCTCCATCTTCTACCAATGGCTTAAGAGTGCCGGCATCACGCTT CCTGCCGACCGCCGAGTCACAGCCCTGGTGCCCTCCGAGGCTGCAGTCCGTCAGCTGAGCCCCGAGGACCGAGCT TTCTGGCTGCAGCCAAGGACGCTGCCGAACCTGGTCAGGGCCCATTTTCTCCAGGGTGCCCTCTTCGAGGAGGAG CTGGCCCGGCTGGGTGGGCAGGAAGTGGCCACCCTGAACCCCACCACACGCTGGGAGATTCGCAACATTAGTGGG AGGGTCTGGGTGCAGAATGCCAGCGTGGATGTGGCTGACCTCCTTGCCACCAACGGTGTCCTACACATCCTCAGC TTCAGCCTCTTCCGGGAATTGCTGCAGCACCATGGGTTGGTGCCCAGATTGAGGCTGCCACTGCCTACACCATC TTTGTGCCCACCAACCGCTCCCTGGAGGCCCAGGGCAACAGCAGTCACCTGGACGCAGACACAGTGCGGCACCAT

PCT/US2003/028547

FIGURE 1163B

CACTGGATCGTCTTCTACAACCACAGTGGCCAGCCTGAGGTGAACCATGTGCCACTGGAAGGCCCCATGCTGGAG GAGGCCCTGCGGGAGAAATGTGTAAACTGCACCAGGAGATTCCGCTGCACTCAGGGCTTCCAGCTGCAGGACACA CCCAGGAAGAGCTGTGTCTACCGATCTGGCTTCTCCCTTCTCCCGGGGCTGCTCTTACACATGTGCCAAGAAGATC CAGGTGCCGGACTGCTGCCCTGGTTTCTTTGGCACGCTGTGTGAGCCATGCCCAGGGGGTCTAGGGGGGGTGTGC TCAGGCCATGGGCAGTGCCAGGACAGGTTCCTGGGCAGCGGGGAGTGCCACTGCCACGAGGGCTTCCATGGAACG GCCTGTGAGGTGTGAGCTGGGCCGCTACGGGCCCAACTGCACCGGAGTGTGTGACTGTGCCCATGGGCTGTGC CAGGAGGGGCTGCAAGGGGACGGAAGCTGTGTCTGTAACGTGGGCTGGCAGGGCCTCCGCTGTGACCAGAAAATC ACCAGCCCTCAGTGCCCTAGGAAGTGCGACCCCAATGCCAACTGCGTGCAGGACTCGGCCGGAGCCTCCACCTGC GCCTGTGCTGCGGGATACTCCGGCAATGGCATCTTCTGTTCAGAGGTGGACCCCTGCGCCCACGGCCATGGGGGC TGCTCCCCTCATGCCAACTGTACCAAGGTGGCACCTGGGCAGCGGACATGCACCTGCCAGGATGGCTACATGGGC GACGGGGAGCTGTGCCAGGAAATTAACAGCTGTCTCATCCACCACGGGGGCTGCCACATTCACGCCGAGTGCATC CCCACTGGCCCCAGCAGGTCTCCTGCAGCTGCCGTGAGGGTTACAGCGGGGATGGCATCCGGACCTGCGAGCTC CTGGACCCCTGCTCTAAGAACAATGGAGGATGCAGCCCATATGCCACCTGCAAAAGCACAGGGGATGGCCAGAGG ACATGTACCTGCGACACAGCCCACACCGTGGGGGACGGCCTCACCTGCCGTGCCCGAGTCGGCCTGGAGCTCCTG AGGGATAAGCATGCCTCATTCTTCAGCCTCCGCCTCCTGGAATATAAGGAGCTCAAGGGCGATGGGCCTTTCACC ATCTTCGTGCCGCACGCAGATCTAATGAGCAACCTGTCGCAGGATGAGCTGGCCCGGATTCGTGCGCATCGCCAG AGCAGCGACCATGAGGCCGTGAACGGCATCCTGCACTTCATTGACCGTGTCCTGCTGCCCCCCGAGGCGCTGCAC TGGGAGCCTGATGATGCTCCCATCCCGAGGAGAAATGTCACCGCCGCCCCAGGGCTTCGGTTACAAGATCTTC AGCGGCCTCCTGAAGGTGGCCGGCCTCCTGCCCTGCTTCGAGAGGCATCCCATAGGCCCTTCACAATGCTGTGG CCCACAGACGCCGCCTTTCGAGCTCTGCCTCCGGATCGCCAGGCCTGGCTGTACCATGAGGACCACCGTGACAAG CTAGCAGCCATTCTGCGGGGCCACATGATTCGCAATGTCGAGGCCTTGGCATCTGACCTGCCCAACCTGGGCCCA GATGATGCTCGCATTGTGCAGCGGCACTTGCCCTTTGAGGGTGGCCTGGCCTATGGCATCGACCAGCTGCTGGAG CCACCTGGCCTTGGTGCTCGCTGTGACCACTTTGAGACCCGGCCCCTGCGACTGAACACCTGCAGCATCTGTGGG CTGGAGCCACCCTGTCCTGAGGGGTCACAGGAGCAGGGCAGCCCTGAGGCCTGCTGGCGCTTCTACCCGAAGTTC TGGACGTCCCCTCCGCTGCACTCTTTGGGATTACGCAGCGTCTGGGTCCACCCCAGCCTTTGGGGTAGGCCCCAA GGCCTGGGCAGGGGCTGCCACCGCAATTGTGTCACCACCACCTGGAAGCCCAGCTGCTGCCCTGGTCACTATGGC AGTGAGTGCCAAGCTTGCCCTGGCGGCCCCAGCAGCCCTTGTAGTGACCGTGGCGTGTGCATGGACGGCATGAGT GGCAGTGGGCAGTGTCTGTGCCGTTCAGGTTTTGCTGGGACAGCCTGTGAACTCTGTGCTCCTGGTGCCTTTGGG CCCCATTGTCAAGCCTGCCGCTGCACTGTGCATGGCCGCTGTGATGAGGGCCTTGGGGGGCTCTGGCTCCTGCTTC TGTGATGAAGGCTGGACTGGGCCACGCTGTGAGGTGCAACTGGAGCTGCAGCCTGTGTACCCCACCCTGTGCA CCCGAGGCTGTGTGCCGTGCAGGCAACAGCTGTGAGTGCAGCCTGGGCTATGAAGGGGATGGCCGTGTGTACA GTGGCAGACCTGTGCCAGGACGGGCATGGTGGCTGCAGTGAGCACGCCAACTGTAGCCAGGTAGGAACAATGGTC ACTTGTACCTGCCTGCCCGACTACGAGGGTGATGGCTGGAGCTGCCGGGCCCGCAACCCCTGCACAGATGGCCAC CGCGGGGGCTGCAGCGAGCACGCCAACTGCTTGAGCACCGGCCTGAACACACGGCGCTGTGAGTGCCACGCAGGC TGCCACTCAGATGCCATGTGCACTGACCTGCACTTCCAGGAGAAACGGGCTGGCGTTTTCCACCTCCAGGCCACC AGCGGCCCTTATGGTCTGAACTTTTCGGAGGCTGAGGCGGCATGCGAAGCACAGGGAGCCGTCCTTGCTTCATTC CCTCAGCTCTCTGCCCAGCAGCTGGGCTTCCACCTGTGCCTCATGGGCTGGCCGAATGGCTCCACTGCC CACCCTGTGGTTTTCCCTGTGGCGGACTGTGGCAATGGTCGGGTGGGCATAGTCAGCCTGGGTGCCCGCAAGAAC CTCTCAGAACGCTGGGATGCCTACTGCTTCCGTGTGCAAGATGTGGCCTGCCGATGCCGAAATGGCTTCGTGGGT ATGCTATTGGGCTATGCCAATGCCACCCAGCGGGGTCTCGACTTCCTGGACTTCCTGGATGATGAGCTCACGTAT AAGACACTCTTCGTCCCTGTCAATGAAGGCTTTGTGGACAACATGACGCTGAGTGGCCCAGACTTGGAGCTGCAT

PCT/US2003/028547

FIGURE 1163C

PCT/US2003/028547

1252/6881 FIGURE 1164

MAGPRGLLPLCLLAFCLAGFSFVRGQVLFKGCDVKTTFVTHVPCTSCAAIKKQTCPSGWLRELPDQITQDCRYEV QLGGSMVSMSGCRRKCRKQVVQKACCPGYWGSRCHECPGGAETPCNGHGTCLDGMDRNGTCVCQENFRGSACQEC QDPNRFGPDCQSVCSCVHGVCNHGPRGDGSCLCFAGYTGPHCDQELPVCQELRCPQNTQCSAEAPSCRCLPGYTQ QGSECRAPNPCWPSPCSLLAQCSVSPKGQAQCHCPENYHGDGMVCLPKDPCTDNLGGCPSNSTLCVYQKPGQAFC TCRPGLVSINSNASAGCFAFCSPFSCDRSATCQVTADGKTSCVCRESEVGDGRACYGHLLHEVQKATQTGRVFLQ LRVAVAMMDQGCREILTTAGPFTVLVPSVSSFSSRTMNASLAQQLCRQHIIAGQHILEDTRTQQTRRWWTLAGQE ITVTFNQFTKYSYKYKDQPQQTFNIYKANNIAANGVFHVVTGLRWQAPSGTPGDPKRTIGQILASTEAFSRFETI LENCGLPSILDGPGPFTVFAPSNEAVDSLRDGRLIYLFTAGLSKLQELVRYHIYNHGQLTVEKLISKGRILTMAN QVLAVNISEEGRILLGPEGVPLQRVDVMAANGVIHMLDGILLPPTILPILPKHCSEEQHKIVAGSCVDCQALNTS TCPPNSVKLDIFPKECVYIHDPTGLNVLKKGCASYCNQTIMEQGCCKGFFGPDCTQCPGGFSNPCYGKGNCSDGI QGNGACLCFPDYKGIACHICSNPNKHGEQCQEDCGCVHGLCDNRPGSGGVCQQGTCAPGFSGRFCNESMGDCGPT GLAOHCHLHARCVSQEGVARCRCLDGFEGDGFSCTPSNPCSHPDRGGCSENAECVPGSLGTHHCTCHKGWSGDGR VCVAIDECELDMRGGCHTDALCSYVGPGQSRCTCKLGFAGDGYQCSPIDPCRAGNGGCHGLATCRAVGGGQRVCT CPPGFGGDGFSCYGDIFRELEANAHFSIFYQWLKSAGITLPADRRVTALVPSEAAVRQLSPEDRAFWLQPRTLPN ${ t LVRAHFLQGALFEEELARLGGQEVATLNPTTRWEIRNISGRVWVQNASVDVADLLATNGVLHILSQVLLPPRGDV$ PGGQGLLQQLDLVPAFSLFRELLQHHGLVPQIEAATAYTIFVPTNRSLEAQGNSSHLDADTVRHHVVLGEALSME TLRKGGHRNSLLGPAHWIVFYNHSGQPEVNHVPLEGPMLEAPGRSLIGLSGVLTVGSSRCLHSHAEALREKCVNC TRRFRCTQGFQLQDTPRKSCVYRSGFSFSRGCSYTCAKKIQVPDCCPGFFGTLCEPCPGGLGGVCSGHGQCQDRF LGSGECHCHEGFHGTACEVCELGRYGPNCTGVCDCAHGLCQEGLQGDGSCVCNVGWQGLRCDQKITSPQCPRKCD PNANCVQDSAGASTCACAAGYSGNGIFCSEVDPCAHGHGGCSPHANCTKVAPGQRTCTCQDGYMGDGELCQEINS CLIHHGGCHIHAECIPTGPQQVSCSCREGYSGDGIRTCELLDPCSKNNGGCSPYATCKSTGDGQRTCTCDTAHTV GDGLTCRARVGLELLRDKHASFFSLRLLEYKELKGDGPFTIFVPHADLMSNLSQDELARIRAHRQLVFRYHVVGC RRLRSEDLLEQGYATALSGHPLRFSEREGSIYLNDFARVVSSDHEAVNGILHFIDRVLLPPEALHWEPDDAPIPR RNVTAAAQGFGYKIFSGLLKVAGLLPLLREASHRPFTMLWPTDAAFRALPPDRQAWLYHEDHRDKLAAILRGHMI RNVEALASDLPNLGPLRTMHGTPISFSCSRTRAGELMVGEDDARIVQRHLPFEGGLAYGIDQLLEPPGLGARCDH FETRPLRLNTCSICGLEPPCPEGSQEQGSPEACWRFYPKFWTSPPLHSLGLRSVWVHPSLWGRPQGLGRGCHRNC VTTTWKPSCCPGHYGSECQACPGGPSSPCSDRGVCMDGMSGSGQCLCRSGFAGTACELCAPGAFGPHCQACRCTV HGRCDEGLGGSGSCFCDEGWTGPRCEVQLELQPVCTPPCAPEAVCRAGNSCECSLGYEGDGRVCTVADLCQDGHG GCSEHANCSQVGTMVTCTCLPDYEGDGWSCRARNPCTDGHRGGCSEHANCLSTGLNTRRCECHAGYVGDGLQCLE ESEPPVDRCLGQPPPCHSDAMCTDLHFQEKRAGVFHLQATSGPYGLNFSEAEAACEAQGAVLASFPQLSAAQQLG FHLCLMGWLANGSTAHPVVFPVADCGNGRVGIVSLGARKNLSERWDAYCFRVQDVACRCRNGFVGDGISTCNGKL LDVLAATANFSTFYGMLLGYANATQRGLDFLDDELTYKTLFVPVNEGFVDNMTLSGPDLELHASNATLLSAN ASQGKLLPAHSGLSLIISDAGPDNSSWAPVAPGTVVVSRIIVWDIMAFNGIIHALASPLLAPPQPQAVLAPEAPP VAAGVGAVLAAGALLGLVAGALYLRARGKPMGFGFSAFQAEDDADDDFSPWQEGTNPTLVSVPNPVFGSDTFCEP FDDSLLEEDFPDTQRILTVK

PCT/US2003/028547

1253/6881 FIGURE 1165A

GCGGCGGTGGCGGGAGACCCGAAC<u>ATG</u>GCGACCGCGCGCACCTTCGGGCCCGAGCGGGAAGCCGAGCCGAGCCGACCA ATGAGTGGACAGTAAAGCACCGCTACAGCGACTTCCATGACCTGCATGAAAAGCTCGTTGCAGAGAAAAGATTG ATAAAAACCTGCTTCCGCCCAAAAAGATAATTGGGAAAAACTCAAGAAGCTTGGTGGAGAAGAGGGAGAAGGATC TGGAGGTCTACCTCCAGAAGCTCCTGGCTGCCTTCCCTGGCGTGACCCCCAGAGTACTGGCCCACTTCTTGCATT TTCACTTCTATGAGATAAATGGCATCACCGCGGCACTGGCTGAAGAGCTCTTTGAGAAAGGAGAACAGCTCCTGG GGGCCGGCGAGGTCTTTGCCATTGGACCCCTGCAGCTGTATGCCGTCACGGAGCAGCTGCAGCAGGGAAAGCCCA CGTGCGCCAGTGGGGATGCCAAGACCGACCTCGGGCACATCCTGGACTTCACCTGTCGCCTTAAGTACCTTAAGG TTTCTGGCACAGAAGGACCTTTTGGGACCAGCAACATTCAGGAGCAGCTCCTGCCGTTCGACCTATCAATATTCA AGTCCCTGCATCAGGTGGAGATAAGTCACTGTGATGCTAAGCACATCAGAGGGCTGGTCGCATCGAAGCCCACCT TAGCCACGCTGAGTGTCCGCTTCTCAGCAACCTCGATGAAGGCAAGTCCTTGTTCCTGAAGCCTCAGAATTTGATG TTGACCTGAGCCACAACAGCATCTCCGAGATCGACGAGTCTGTGAAACTGATCCCAAAGATTGAGTTCCTGGACC TGAGTCACAATGGATTGCTGGTTGTGGACAATCTGCAGCACCTGTATAACCTTGTGCATCTGGACCTGTCCTACA TAGAGAGTCTGAGTGGCCTGCACAAGCTCTACTCACTGGTCAACCTGGATCTCCGGGACAACAGGATCGAACAGA TGGAGGAGGTCCGGAGCATAGGCAGCCTCCCGTGTCTGGAGCACGTGTCTCTGCTGAACAACCCTCTGAGCATCA CCACAGAGAAGGAGCTGGACACTGTGGAAGTGCTGAAAGCAATTCAGAAAGCCAAGGAGGTCAAACTGA GCAACCCAGAGAAGAAGGGTGGTGAAGACTCCCGGCTCTCAGCTGCCCCCTGCATCAGACCCAGCAGCTCCCCTC AGGCCCTGGCCAGCAGCCTCTCGTCCACTGACAGTCTGACTCCCGAGCACCAGCCCATTGCCCAGGGATGTTCTG ATTCCTTGGAGTCCATCCCTGCGGGACAGCAGCTTCCGATGATTTAAGGGACGTGCCAGGAGCTGTTGGTGGTG CAAGCCCAGAACATGCCGAGCCGGAGGTCCAGGTGGTGCCGGGGTCTGGCCAGATCATCTTCCTGCCCTTCACCT GCATTGGCTACACGGCCACCAATCAGGACTTCATCCAGCGCCTGAGCACACTGATCCGGCAGGCCATCGAGCGGC AGGAGGAAGAAGAGGAGGACGTGGCTGAGAACCGCTACTTTGAAATGGGGCCCCCAGACGTGGAGGAGGAGGAGGA GGGCCCTGGGCGCGGACGAGGACTTCCTGCTGGAGCACATCCGCATCCTCAAGGTGCTGTGGTGCTTCCTGATCC ATGTGCAGGGCAGTATCCGCCAGTTCGCCGCCTGCCTTGTGCTCACCGACTTCGGCATCGCAGTCTTCGAGATCC ACCTCACCGAGTTTGGCTTCCTCATGCCGGAGCTGTGTCTGGTGCTCAAGGTACGGCACAGTGAGAACACGCTCT TCATTATCTCGGACGCCGCCAACCTGCACGAGTTCCACGCGGACCTGCGCTCATGCTTTGCACCCCAGCACATGG CCATGCTGTGTAGCCCCATCCTCTACGGCAGCCACCACCAGCCTGCAGGAGTTCCTGCGCCAGCTGCTCACCTTCT ACAAGGTGGCTGCCGGGAGCGCAGCCAGGGCTGCTTCCCCGTCTACCTGGTCTACAGTGACAAGCGCA TGGTGCAGACGGCCGCCGGGGACTACTCAGGCAACATCGAGTGGGCCAGCTGCACACTCTGTTCAGCCGTGCGGC GCTCCTGCTGCGCCCCTCTGAGGCCGTCAAGTCCGCCGCCATCCCCTACTGGCTGTTGCTCACGCCCCAGCACC TCAACGTCATCAAGGCCGACTTCAACCCCATGCCCAACCGTGGCACCCACAACTGTCGCAACCGCAACAGCTTCA AGCTCAGCCGTGTGCCGCTCTCCACCGTGCTGGACCCCACACGCAGCTGTACCCAGCCTCGGGGCGCCTTTG $\tt CTGATGGCCACGTGCTAGAGCTGCTCGTGGGGTACCGCTTTGTCACTGCCATCTTCGTGCTGCCCCACGAGAAGT$ TCCACTTCCTGCGCGTCTACAACCAGCTGCGGGCCTCGCTGCAGGACCTGAAGACTGTGGTCATCGCCAAGACCC GTCCCCAGGAGGTCCCAGCAGAGGCTCTGGCCCCGGCCCCAGTGGAAGTCCCAGCTCCAGCCCCTGCAGCAGCCT CAGCCTCAGGCCCAGCGAAGACTCCGGCCCCAGCAGAGGCCTCAACTTCAGCTTTGGTCCCAGAGGAGACGCCAG TGGAAGCTCCAGCCCACCCCCAGCCGAGGCCCCTGCCCAGTACCCGAGTGAGCACCTCATCCAGGCCACCTCGG TCATCGAGCTCTTCCACAGCAGCATTGCTGAGGTTGAAAACGAGGAGCTGAGGCACCTCATGTGGTCCTCGGTGG TGTTCTACCAGACCCCAGGGCTGGAGGTGACTGCCTGCGTGCTGCTCCCACCAAGGCTGTACTTTGTGCTCC

PCT/US2003/028547

1254/6881 FIGURE 1165B

ACGACGGCCTCCGCCGCTACTTCTCAGAGCCACTGCAGGATTTCTGGCATCAGAAAAACACCGACTACAACAACA AGCATTTCCGGCTGACGGGTTCCACCCCGATGCAGGTGGTCACGTGCTTGACGCGGGACAGCTACCTGACGCACT GCTTCCTCCAGCACCTCATGGTCGTGCTGTCCTCTCTGGAACGCCCCCCCGCCGGAGCCTGTTGACAAGGACT TCTACTCCGAGTTTGGGAACAAGACCACAGGGAAGATGGAGAACTACGAGCTGATCCACTCTAGTCGCGTCAAGT TTACCTACCCCAGTGAGGAGGAGATTGGGGGACCTGACGTTCACTGTGGCCCAAAAGATGGCTGAGCCAGAGAAGG CCCCAGCCTCAGCATCCTGCTGTACGTGCAGGCCTTCCAGGTGGGCATGCCACCCCCTGGGTGCTGCAGGGGCC CCCTGCGCCCCAAGACACTCCTGCTCACCAGCTCCGAGATCTTCCTCCTGGATGAGGACTGTGTCCACTACCCAC TGCCCGAGTTTGCCAAAGAGCCGCCGCAGAGAGACAGGTACCGGCTGGACGATGGCCGCCGCGTCCGGGACCTGG ACCGAGTGCTCATGGGCTACCAGACCTACCCGCAGGCCCTCACCCTCGTCTTCGATGACGTGCAAGGTCATGACC TCCAGTGGCAGGTGTTTGTCCCCAGTGCTGAGAGCAGAGAAGCTCATCTCGCTGTTGGCTCGCCAGTGGGAGG $\texttt{CCCTGTGTGGCCGTGAGCTGCCTGTCGAGCTCACCGGC} \underline{\textbf{TAG}} \\ \texttt{CCCAGGCCACAGCCAGCCTGTCGTGTCCAGCCTG} \\$ ACGCCTACTGGGGCAGGGCAGCAGGCTTTTGTGTTCTCTAAAAATGTTTTATCCTCCCTTTGGTACCTTAATTTG · GCCCCTCAGGGCTGTCGGTGTCAGCCTCCCACAGGTGGTACAGCCGTGCACACCAGTGTCGTGTCTGCTG TTGTGGGACCGTTGTTAACACGTGACACTGTGGGTCTGACTTTCTCTACACGTCCTTTCCTGAAGTGTCGAG CAGAATGCACATTGGAAGCTCCCACCCCATATTGTTCTTCAAAGTGGAGGTCTCCCCTGATCCAGACAAGTGGGA GAGCCCGTGGGGGCAGGGGACCTGGAGCTGCCAGCACCAAGCGTGATTCCTGCTGCTGTATTCTCTATTCCAAT AAAGCAGAGTTTGACACCGTCTTAAAAAAAAA

PCT/US2003/028547

1255/6881 FIGURE 1166

MATARTFGPEREAEPAKEARVVGSELVDTYTVYIIQVTDGSHEWTVKHRYSDFHDLHEKLVAERKIDKNLLPPKK IIGKNSRSLVEKREKDLEVYLQKLLAAFPGVTPRVLAHFLHFHFYEINGITAALAEELFEKGEQLLGAGEVFAIG PLQLYAVTEQLQQGKPTCASGDAKTDLGHILDFTCRLKYLKVSGTEGPFGTSNIQEQLLPFDLSIFKSLHQVEIS HCDAKHIRGLVASKPTLATLSVRFSATSMKEVLVPEASEFDEWEPEGTTLEGPVTAVIPTWQALTTLDLSHNSIS EIDESVKLIPKIEFLDLSHNGLLVVDNLQHLYNLVHLDLSYNKLSSLEGLHTKLGNIKTLNLAGNLLESLSGLHK $\verb"LYSLVNLDLRDNR" I = QMEEVRS I GSLPCLE HVSLLNNPLS I I PDYRTKVLAQFGERASEVCLDDTVTTEKELDTV$ EVLKAIQKAKEVKSKLSNPEKKGGEDSRLSAAPCIRPSSSPPTVAPASASLPQPILSNQGIMFVQEEALASSLSS TDSLTPEHQPIAQGCSDSLESIPAGQAASDDLRDVPGAVGGASPEHAEPEVQVVPGSGQIIFLPFTCIGYTATNQ DFIQRLSTLIRQAIERQLPAWIEAANQREEGQGEQGEEEDEEEEEEDVAENRYFEMGPPDVEEEEGGGQGEEEE EEEEDEEAEEERLALEWALGADEDFLLEHIRILKVLWCFLIHVQGSIRQFAACLVLTDFGIAVFEIPHQESRGSS QHILSSLRFVFCFPHGDLTEFGFLMPELCLVLKVRHSENTLFIISDAANLHEFHADLRSCFAPQHMAMLCSPILY GSHTSLQEFLRQLLTFYKVAGGCQERSQGCFPVYLVYSDKRMVQTAAGDYSGNIEWASCTLCSAVRRSCCAPSEA VKSAAIPYWLLLTPQHLNVIKADFNPMPNRGTHNCRNRNSFKLSRVPLSTVLLDPTRSCTQPRGAFADGHVLELL VGYRFVTAIFVLPHEKFHFLRVYNQLRASLQDLKTVVIAKTPGTGGSPQGSFADGQPAERRASNDQRPQEVPAEA LAPAPVEVPAPAAAASASGPAKTPAPAEASTSALVPEETPVEAPAPPPAEAPAQYPSEHLIQATSEENQIPSHL PACPSLRHVASLRGSAIIELFHSSIAEVENEELRHLMWSSVVFYQTPGLEVTACVLLSTKAVYFVLHDGLRRYFS EPLQDFWHQKNTDYNNSPFHISQCFVLKLSDLQSVNVGLFDQHFRLTGSTPMQVVTCLTRDSYLTHCFLQHLMVV LSSLERTPSPEPVDKDFYSEFGNKTTGKMENYELIHSSRVKFTYPSEEEIGDLTFTVAQKMAEPEKAPALSILLY VQAFQVGMPPPGCCRGPLRPKTLLLTSSEIFLLDEDCVHYPLPEFAKEPPQRDRYRLDDGRRVRDLDRVLMGYQT ${\tt YPQALTLVFDDVQGHDLMGSVTLDHFGEVPGGPARASQGREVQWQVFVPSAESREKLISLLARQWEALCGRELPV}$ ELTG

PCT/US2003/028547

FIGURE 1167

GGCACGAGGAGCGTTTCGTTTGGACTTCTCGACTTGAGTGCCCGCCTCCTTCGCCGCCGCCTCTGCAGTCCTCAG CGCAGTTATGCCCAGTTCTTCCCGCTGTGGGGACACGACCACGGAGGAATCCTTGCTTCAGGGACTCGGGACCCT GCTGGACCCCTTCCTCGGGTTTAGGGGATGTGGGGACCAGGAGAAAGTCAGGATCCCTAAGAGTCTTCCCTGCCT ${\tt GGATGGATGAGTGGCTTCTTCTCCACCTAGATTCTTTCCACAGGAGCCAGCATACTTCCTGAAC{\color{red} {\bf ATC} {\bf GAGAGTGT} }$ TGTTCGCCGCTGCCCATTCTTATCCCGAGTCCCCCAGGCCTTTCTGCAGAAAGCAGGCAAATCTCTGTTGTTCTA CTACCAACAGATCAAAGAAACCCCTCCGGCCAGTGAGAAAGACAAAACTGCTAAGGCCAAGGTCCAACAGACTCC TGCAAGCAAATGCCCTTTCCTGGCAGCACAGATGAATCAGAGAGGCAGCAGTGTCTTCTGCAAAGCCAGTCTTGA GCTTCAGGAGGATGTGCAGGAAATGAATGCCGTGAGGAAAGAGGTTGCTGAAACCTCAGCAGGCCCCAGTGTGGT TAGTGTGAAAACCGATGGAGGGGATCCCAGTGGACTGCTGAAGAACTTCCAGGACATTATGCAAAAGCAAAGACC AGAAAGAGTGTCTCATCTTCTAAGATAACTTGCCAAAATCTGTTTCCACTTTTCAGTATGATCGTTTCTTTGA GAAAAAATTGATGAGAAAAAGAATGACCACCTATCGAGTTTTTAAAACTGTGAACCGGCGAGCACACATCTT CCCCATGGCAGATGACTATTCAGACTCCCTCATCACCAAAAAGCAAGTGTCAGTCTGGTGCAGTAATGACTACCT AGGAATGAGTCGCCACCCACGGGTGTGTGGGGCAGTTATGGACACTTTGAAACAACATGGTGCTGGGGCAGGTGG TACTAGAAATATTTCTGGAACTAGTAAATTCCATGTGGACTTAGAGCGGGAGCTGGCAGACCTCCATGGGAAAGA TGCCGCACTCTTGTTTTCCTCGTGCTTTGTGGCCAATGACTCAACCCTCTTCACCCTGGCTAAGATGATGCCAGG CTGTGAGATTTACTCTGATTCTGGGAACCATGCCTCCATGATCCAAGGGATTCGAAACAGCCGAGTGCCAAAGTA CATCTTCCGCCACAATGATGTCAGCCACCTCAGAGAACTGCTGCAAAGATCTGACCCCTCAGTCCCCAAGATTGT GGCATTTGAAACTGTCCATTCAATGGATGGGGCGGTGTGCCCACTGGAAGAGCTGTGTGATGTGGCCCATGAGTT TGGAGCAATCACCTTCGTGGATGAGGTCCACGCAGTGGGGCTTTATGGGGCTCGAGGCGGAGGGATTGGGGATCG GGATGGAGTCATGCCAAAAATGGACATCATTTCTGGAACACTTGGCAAAGCCTTTGGTTGTTGGAGGGTACAT CGCCAGCACGAGTTCTCTGATTGACACCGTACGGTCCTATGCTGCTGGCTTCATCTTCACCACCTCTCTGCCACC CATGCTGCTGGCTGGAGCCCTGGAGTCTGTGCGGATCCTGAAGAGCGCTGAGGGACGGGTGCTTCGCCGCCAGCA CCAGCGCAACGTCAAACTCATGAGACAGATGCTAATGGATGCCGGCCTCCCTGTTGTCCACTGCCCCAGCCACAT CATCCCTGTGCGGGTTGCAGATGCTGCTAAAAACACAGAAGTCTGTGATGAACTAATGAGCAGACATAACATCTA CGTGCAAGCAATCAATTACCCTACGGTGCCCCGGGGAGAAGAGCTCCTACGGATTGCCCCCACCCCTCACCACAC ACCCCAGATGATGAACTACTTCCTTGAGAATCTGCTAGTCACATGGAAGCAAGTGGGGGCTGGAACTGAAGCCTCA TTCCTCAGCTGAGTGCAACTTCTGCAGGAGGCCACTGCATTTTGAAGTGATGAGTGAAAGAGAGAAGTCCTATTT $\tt CTCAGGCTTGAGCAAGTTGGTATCTGCTCAGGCC\underline{TGA}_{GCATGACCTCAATTATTTCACTTAACCCCAGGCCATTA$

PCT/US2003/028547

FIGURE 1168

MESVVRRCPFLSRVPQAFLQKAGKSLLFYAQNCPKMMEVGAKPAPRALSTAAVHYQQIKETPPASEKDKTAKAKV QQTPDGSQQSPDGTQLPSGHPLPATSQGTASKCPFLAAQMNQRGSSVFCKASLELQEDVQEMNAVRKEVAETSAG PSVVSVKTDGGDPSGLLKNFQDIMQKQRPERVSHLLQDNLPKSVSTFQYDRFFEKKIDEKKNDHTYRVFKTVNRR AHIFPMADDYSDSLITKKQVSVWCSNDYLGMSRHPRVCGAVMDTLKQHGAGAGGTRNISGTSKFHVDLERELADL HGKDAALLFSSCFVANDSTLFTLAKMMPGCEIYSDSGNHASMIQGIRNSRVPKYIFRHNDVSHLRELLQRSDPSV PKIVAFETVHSMDGAVCPLEELCDVAHEFGAITFVDEVHAVGLYGARGGGIGDRDGVMPKMDIISGTLGKAFGCV GGYIASTSSLIDTVRSYAAGFIFTTSLPPMLLAGALESVRILKSAEGRVLRRQHQRNVKLMRQMLMDAGLPVVHC PSHIIPVRVADAAKNTEVCDELMSRHNIYVQAINYPTVPRGEELLRIAPTPHHTPQMMNYFLENLLVTWKQVGLE LKPHSSAECNFCRRPLHFEVMSEREKSYFSGLSKLVSAQA

PCT/US2003/028547

1258/6881 FIGURE 1169

ATGCCCTACCAATATCCATTGCTGACCCCGGAGCAGAAGGAGCTGTCTGACATGACTCATCGCATCGTAGCTCTG
GGCAAGGGCATCCCGGCTGCAGATGAGTCCACTGGGAGCACTGCCAAGTGGCTGCAGTCCATTGGCACCGAGAAT
ACCGAGGAGAACCGGTGCTTCTACCGCCAGCTGTGGCTGACAGCTGACAACCGCGTGAACCCCTGCATCAAGGGT
GTCATCCTCTTCCATGAGACGCTGTACCAAAAGGCGGATGATGGGCGTCCCTTCCCCCAAGTTATCAAATCCAAG
GGCAATGTTGTGAGCATCAAGTGTGTCAATGTCCTGGCCCACTATGCCAGCATCTGCCAGCAGAATGGCATTGTG
CTCTTCTACTGCCAGTATGTAACCGAGAAGGTGTGGCTGCTCTACAAGGCTCTGAGTGACCATCAACCTG
GAAGGCACCTTGCTGAAGTCCAATATGGTCACCCCAGGCCATGCCTGCATCCAGAAGTTTTCTCATGAGGAGATT
GCCATGGCAACTGTCACAAGCACTACACTCTGGGGAATAAGCGGCCTAGAAGGATCACAACTGGGCCAGAACAGG
GCCCACCCAGACTCATCACTGAGGCAAGGAAGTGTCCATCAACCTCAATGCCATTAACAAGTGCCCCCC
CTGAAGCCCTTGGGGGCCTGACCTTCTCATATAGCTGA

PCT/US2003/028547

FIGURE 1170

PCT/US2003/028547

FIGURE 1171

MAKSKNHTTHNQSRKWHRNGIKKPRSQRYESLKGVDPKFLRNMRFAKKHNKKGLKKMQANNAKAMSARAEAIKAL VKPKEVKPKIPKGVSRKLDRLAYIAHPKLGKRARARIAKGLRLCRPKAKAKAKAKDQTKAQAAAPASVPAQAPKR TQAPTKASE

PCT/US2003/028547

FIGURE 1172

GGGCGCTGAGAGGCGAGCGTGAGCCCAGCGACAGGAGAGTGAGCTCACCACGCGCAGCGCCATGACCAGCAAGGG TCCCGAGGAGGAGCACCCATCGGTGACGCTCTTCCGCCAGTACCTGCGTATCCGCACTGTCCAGCCCAAGCCTGA CTATGGAGCTGCTGTGGCTTTCTTTGAGGAGACAGCCCGCCAGCTGGGCCTGGGCTGTCAGAAAGTAGAGGTGGC ACCTGGCTATGTGGTGACCGTGTTGACCTGGCCAGGCACCCAACCCTACACTCTCCATCTTGCTCAACTCCCA CACGGATGTGGTGCCTGTCTTCAAGGAACATTGGAGTCACGACCCCTTTGAGGCCTTCAAGGATTCTGAGGGCTA CATCTATGCCAGGGGTGCCCAGGACATGAAGTGCGTCAGCATCCAGTACCTGGAAGCTGTGAGGAGGCTGAAGGT GGAGGCCACCGGTTCCCCAGAACCATCCACATGACCTTTGTGCCTGATGAGGAGGTTGGGGGTCACCAAGGCAT GGAGCTGTTCGTGCAGCGGCCTGAGTTCCACGCCCTGAGGGCAGGCTTTGCCCTGGATGAGGGCATAGCCAATCC CCATGCCTCACGCTTCATGGAGGACACAGCAGCAGAGAAGCTGCACAAGGTTGTAAACTCCATCCTGGCATTCCG GGAGAAGGAATGGCAGAGGCTGCAGTCAAACCCCCACCTGAAAGAGGGGGTCCGTGACCTCCGTGAACCTGACTAA GCTAGAGGGTGGCCTATAACGTGATACCTGCCACCATGAGCGCCAGCTTTGACTTCCGTGTGGCACCGGA TGTGGACTTCAAGGCTTTTGAGGAGCAGCTGCAGAGCTGGTGCCAGGCAGCTGGCGAGGGGGGTCACCCTAGAGTT TGCTCAGAAGTGGATGCACCCCCAAGTGACACCTACTGATGACTCAAACCCTTGGTGGGCAGCTTTTAGCCGGGT CTGCAAGGATATGAACCTCACTCTGGAGCCTGAGATCATGCCTGCTGCCACTGACAACCGCTATATCCGCGGGGT GGGGGTCCCAGCTCTAGGCTTCTCACCCATGAACCGCACACCTGTGCTGCTGCACGACCACGATGAACGGCTGCA ${\tt CAGTGACAGCTGAACCCTGGAACTCCTAAACCTTTGCCCCTGGGGCTTCCATCCCAACCAGTGCCAAGGACCTCC}$ TCTTCCCCCTTCCAAATAATAAAGTCTATGGACAGGGCTGTCTCTGAAGTACTAACACAAGGACA

PCT/US2003/028547

1262/6881 FIGURE 1173

MTSKGPEEHPSVTLFRQYLRIRTVQPKPDYGAAVAFFEETARQLGLGCQKVEVAPGYVVTVLTWPGTNPTLSSI LLNSHTDVVPVFKEHWSHDPFEAFKDSEGYIYARGAQDMKCVSIQYLEAVRRLKVEGHRFPRTIHMTFVPDEEVG GHQGMELFVQRPEFHALRAGFALDEGIANPTDAFTVFYSERSPWWVRVTSTGRPGHASRFMEDTAAEKLHKVVNS ILAFREKEWQRLQSNPHLKEGSVTSVNLTKLEGGVAYNVIPATMSASFDFRVAPDVDFKAFEEQLQSWCQAAGEG VTLEFAQKWMHPQVTPTDDSNPWWAAFSRVCKDMNLTLEPEIMPAATDNRYIRAVGVPALGFSPMNRTPVLLHDH DERLHEAVFLRGVDIYTRLLPALASVPALPSDS

PCT/US2003/028547

FIGURE 1174

CGCCAGCACGCGCCTGCTTCCCGTCTGCGCGAGTCCACGCAGCTCCCCAGATCAAGAAGCTGAGGCCCCAGGTTA CACACTAAAGTAAATGGCAGAGGCAGAAATAACACCTATGTCCTCCTGACCCCAAGGCATGTTCTTAAAGTTCTG GAAACCTCCTGGAGGCTTCCTTGCTGCTCCTCTGGGACTGCCACCCTGGGCAGGGTGTTCTGTGGCCCCTCATCA GCACCATCCAGGTGCAGGGCCAGGCCCTCTTCTTCCGAGAGGCCCTGCCCGGCAGTGGGCAGGCTCGCTTCTCTG TACTGCTGCTGCATGGTATTCGCTTCTCCTCCGAGACCTGGCAGAACCTGGGTACACTGCACAGGCTGGCCCAGG CTGGCTACCGGGCTGTGGCCATTGACCTGCCAGGTCTGGGGCACTCCAAGGAAGCAGCAGCCCCTGCCCCTATTG GGGAGCTGGCCCCTGGCAGCTTCCTGGCGGCTGTGGTGGATGCCTTGGAGCTGGGCCCCCCGGTTGTGATCAGTC CATCACTGAGTGGCATGTACTCCCTGCCCTTCCTCACGGCCCCTGGCTCCCAGCTCCCGGGCTTTGTGCCAGTGG CCCCCATCTGCACTGACAAAATCAATGCTGCCAACTATGCCAGTGTGAAGACTCCAGCTCTGATTGTATATGGAG ACCAGGACCCCATGGGTCAGACCAGCTTTGAGCACCTGAAGCAGCTGCCCAACCACCGGGTGCTGATCATGAAGG GGGCGGGCACCCCTGTTACCTGGACAAACCAGAGGAGTGGCATACAGGGCTGCTGGACTTCCTGCAGGGGCTCC TTGTCTTTCTACCTCTTTCTCTTGCAGTGATAGACTGAGGGGGTAAAATCAAGAGAAAAAACTCTCAGGAATCA TCCTTCCCTGCTCTGCCCAGCCTTTCCCTCCCACCCACTCCTCTTCTGCAAATGCCCTGAAGGCCAGCCCTTA CATCCTTGTTTCCAAATATGACCCTTCGCTTGAGGGCAACTGCATAGGTACATCTAACTCTGGACTGGCATGCAC ATTGTCATGTGCAGCTTTGCATATACACACATGCATACATGAGCCTCCACACAAGCACTTGCACACATGTGGACT GGCTTAGGGTGTGGCCAGCCCTGAAAGCTACTTGGACACAGGTTTCAGCTGGCCCCAGCCCAGAAGTGACCCCCA GAAAGGGAGGCCACCGCTTTGCCCCCTGCTTTTACCCTTCCTGGGTGCTCTACACCTCAGGTTACCAGGCC TGAGGCATCTCAGCCAAGCTTGTTTCCTGCTCTGAGGCTTGTGGGGTGGAGCCAGAGTGGAGGTCGGTGAAATA AAGTGATGCAATTAGAAAAAAAAAAAAAAAAAAAAAA

PCT/US2003/028547

1264/6881 FIGURE 1175

 ${\tt MAASVEQREGTIQVQGQALFFREALPGSGQARFSVLLLHGIRFSSETWQNLGTLHRLAQAGYRAVAIDLPGLGHS} \\ {\tt KEAAAPAPIGELAPGSFLAAVVDALELGPPVVISPSLSGMYSLPFLTAPGSQLPGFVPVAPICTDKINAANYASV} \\ {\tt KTPALIVYGDQDPMGQTSFEHLKQLPNHRVLIMKGAGHPCYLDKPEEWHTGLLDFLQGLQ} \\$

PCT/US2003/028547

FIGURE 1176

ATAACCCCTCATTGTTCGCAGCTGATGTCACTCGCAGTTGTGAGCGGCCGCCTCTCCCGGGGACAATGTGGGACT ${\tt AGGGCGAGACTGTAAAGCGAATCCGGGAGCAGCAGTGCCCGGATCACCATCTCCGAGGGCTCCTGCCCTGAAC}$ GCATCACCACCATCACCGGGTCTACAGCAGCTGTCTTCCATGCAGTCTCCATGATTGCTTTCAAACTGGATGAGG ACCTTTGTGCTGCTCCTGCAAATGGTGGAAATGTCTCCAGGCCTCCAGTGACCCTGCGCCTTGTCATCCCTGCCA GTCAGTGTGGCTCACTGATTGGGAAGGCTGGCACCAAGATCAAGGAGATCCGAGAGACTACGGGTGCCCAGGTAC TCTCCCTAGGTACTGTTCTTCTCTCTGCCAACCAGGGCTTCTCTGTCCAGGGTCAGTATGGGGCTGTGACCCCAG CTGAGGTCACCAAGCTCCAGCAGCTCTCAAGCCATGCGGTCCCCTTTGCCACACCCAGCGTGGTGCCAGGACTGG ATCCCGGCACACAGACCAGCTCACAGGAGTTCTTGGTTCCCAACGATTTGATTGGCTGTGATCGGGCGCCAGG GCAGCAAGATCAGCGAGATCCGGCAGATGTCAGGGGCACATATCAAGATCGGGAACCAAGCAGAGGGCGCTGGGG AGCGGCATGTCACCATCACTGGCTCTCCGGTCTCCATCGCCCTGGCCCAGTACCTCATCACTGCCTGTCTAGAGA CGGCCCTGCCCACAGCTCCCCCTGGCCTGCTGGGCACACCCTATGCCATCTCCCTCTCCAACTTCATCGGCCTCA AGCCCATGCCCTTCTTGGCTTTACCACCTGCTTCCCCAGGGCCGCCGGGCTTGGCGGCCTACACTGCCAAGA AGGGGCAGGCAGCACCAGCAGGGGGCTGCCTCTGCACCCTACCCCCAAGGAGACTCCACCCTGGGGTCCC TGGGGGCAGTTTCTGGCCCAGGGGTCTGAGCTGCGGCAGCCCCAGGGCAGGGGCCCTACCTCCTCAGCTCTGTG AAAAAAA

PCT/US2003/028547

1266/6881 FIGURE 1177

MSGSDGGLEEEPELSITLTLRMLMHGKEVGSIIGKKGETVKRIREQSSARITISEGSCPERITTITGSTAAVFHA VSMIAFKLDEDLCAAPANGGNVSRPPVTLRLVIPASQCGSLIGKAGTKIKEIRETTGAQVQVAGDLLPNSTERAV TVSGVPDAIILCVRQICAVILESPPKGATIPYHPSLSLGTVLLSANQGFSVQGQYGAVTPAEVTKLQQLSSHAVP FATPSVVPGLDPGTQTSSQEFLVPNDLIGCVIGRQGSKISEIRQMSGAHIKIGNQAEGAGERHVTITGSPVSIAL AQYLITACLETAKSTSGGTPSSAPADLPAPFSPPLTALPTAPPGLLGTPYAISLSNFIGLKPMPFLALPPASPGP PPGLAAYTAKMAAANGSKKAERQKFSPY

PCT/US2003/028547

FIGURE 1178

 $\tt CCTCTGGAGTCCCTGTGGCAGAACTCAAATGGAAGGAGGAGCAGCTGCACCCAGGGGAGCAGGTGTCACCTCCGTTGGATAGAGCCGGCCAGGTTGCAGCGGACACACTCGCAGGTCGCTGTGGCCCCAGCCTCGCCTGACAGAATG$

AGCGGCTCGGACGGGGGACTGGAGGAGGAGCCAGAGCTCAGCATCACCCTCACGCTGCGGATGCTGATGCACGGG AAGGAAGTGGGCAGCATCATCGGGAAGAAGGGCGAGACTGTAAAGCGAATCCGGGAGCAGAGCAGTGCCCGGATC ACCATCTCCGAGGGCTCCTGCCCTGAACGCATCACCACCATCACCGGGTCTACAGCAGCTGTCTTCCATGCAGTC TCCATGATTGCTTTCAAACTGGATGAGGACCTTTGTGCTGCTCCTGCAAATGGTGGAAATGTCTCCAGGCCTCCA GTGACCCTGCGCCTTGTCATCCCTGCCAGTCAGTGTGGCTCACTGATTGGGAAGGCTGGCACCAAGATCAAGGAG GGAGCCACTATCCCCTACCATCCGAGCCTCTCCCTAGGTACTGTTCTTCTCTCTGCCAACCAGGGCTTCTCTGTC CAGGGTCAGTATGGGGCTGTGACCCCAGCTGAGGTCACCAAGCTCCAGCAGCTCTCAAGCCATGCGGTCCCCTTT GCCACACCCAGCGTGGTGCCAGGACTGGATCCCGGCACACAGACCAGCTCACAGGAGTTCTTGGTTCCCAACGAT TTGATTGGCTGTGTGATCGGGCGCCAGGGCAGCAAGATCAGCGAGATCCGGCAGATGTCAGGGGCACATATCAAG ATCGGGAACCAAGCAGAGGGCGCTGGGGAGCGGCATGTCACCATCACTGGCTCTCCGGTCTCCATCGCCCTGGCC CAGTACCTCATCACTGCCTGTCTAGAGACGGCCAAGTCTACCTCTGGGGGGACGCCCAGCTCGGCCCCGCAGAC CTGCCTGCCCCTTCTCGCCACCCCTGACGGCCCTGCCCACAGCTCCCCCTGGCCTGCTGGGCACACCCTATGCC ATCTCCCTCTCCAACTTCATCGGCCTCAAGCCCATGCCCTTCTTGGCTTTACCACCTGCTTCCCCAGGGCCGCCG CCGGGCTTGGCGGCCTACACTGCCAAGATGGCAGCAGCTAATGGGAGCAAGAAGGCTGAGCGGCAGAAATTCTCC \mathtt{CCCTAC} GCCCAAGGAGAC1'CCACCCTGGGGTCCCAAACGCCGCTAACGCCAGACGCATGGATGCACCCCCTACCCTGCCT CCATCTATGGGAGTTCTTTCTCTCAGAGTGGGGGCAGTTTCTGGCCCAGGGGTCTGAGCTGCGGCAGCCCCAGGG CAGGGGGCCCTACCTCCTCAGCTCTGTGCTTGGATACAGGGAGCCAGCAGGAGACTCCCTAGTGCCCCCACCATG GCGGGTGTCACTCACGCACTCCCCATCCCTTAGGGCTTCCTGGCCTACTGCATCCTTGTGGGAGTCAGGGAGGAG GGCCCGTTGGGTAGCTGGGGCCAGGCTTCTCCCCACCACCTGCAGATTTCTTGCTGCTTCCACTGATACCCTT TTGACTGGAATGAACTGGCTGGGCTTGTCAGGGGGCACCCCAAAGAGGGGGCACTGCCAGGTAGCTGGGGGAGTG TCTCAGCGACCA

PCT/US2003/028547

1268/6881 FIGURE 1179

MSGSDGGLEEPELSITLTLRMLMHGKEVGSIIGKKGETVKRIREQSSARITISEGSCPERITTITGSTAAVFHA
VSMIAFKLDEDLCAAPANGGNVSRPPVTLRLVIPASQCGSLIGKAGTKIKEIRETTGAQVQVAGDLLPNSTERAV
TVSGVPDAIILCVRQICAVILESPPKGATIPYHPSLSLGTVLLSANQGFSVQGQYGAVTPAEVTKLQQLSSHAVP
FATPSVVPGLDPGTQTSSQEFLVPNDLIGCVIGRQGSKISEIRQMSGAHIKIGNQAEGAGERHVTITGSPVSIAL
AQYLITACLETAKSTSGGTPSSAPADLPAPFSPPLTALPTAPPGLLGTPYAISLSNFIGLKPMPFLALPPASPGP
PPGLAAYTAKMAAANGSKKAERQKFSPY

PCT/US2003/028547

1269/6881 FIGURE 1180

ACTCTTTGGAGATGGGAATTTGTATCCCCTTCTACAGATGGAGAAGCTGAGGCTCAGAGGGTTGAATGGGCTCCC CAGGCTTACACAGCTCGTGAGACACATAAGCACCCTGGTCAGAGTGATGTGTGGCGCTCAAGGTCCATGCAGT CTCTCGAACCCCTCTTTGGCTGCCCCAGCGAGAGCCGGCCAGGTTGCAGCGCGGACACACTCGCAGGTCGCTGTG GCCCCAGCCTCGCCTGACAGAATGAGCGGCTCGGACGGGGGGACTGGAGGAGGCGAGGCTCAACATCACCCTC ACGCTGCGGATGCTGATGCACGGGAAGGAAGTGGGCAGCATCATCGGGAAGAAGGGCGAGACTGTAAAGCGAATC CGGGAGCAGGTGAGGATGGAGTTTGGGGGAGGGGAGCCCAGGGCACCTGATGTGGAGGGGAGATCCCTGCCCCACTT TCTCTCTGAACCACTCCTTCTGGGCTGACCAGTGAGTCCCCCAGAGGGTGGCAGTTTTGAGCCTTGCCTCAGGCC ${\tt TGGTGAGTGGGGCAGGCAGGTTCCGGCAAGGGAGCAGGGAAGATGCCCGGCTGCCCGGCGCTCATTCTATA}$ TCTGCAGAGCAGTGCCCGGATCACCATCTCCGAGGGCTCCTGCCCTGAACGCATCACCACCATCACCGGGTCTAC AGCAGCTGTCTTCCATGCAGTCTCCATGATTGCTTTCAAACTGGATGAGGACCTTTGTGCTGCTCCTGCAAATGG AGCAGTTGTAAGAGGGGTGTTGGGCTTATGGCGTCCTCCCCACCTAGAGAGCTCTGAGCCTGGGCAGCCCTTTTC TGGGTTATGGGAGCAGCCAGAAGTGGCCCCTGTTCTCTGTTTGCAGACTACGGGTGCCCAGGTACAGGTGGCAGG GGACCTGCTCCCCAACTCCACAGAGCGAGCTGTTACGGTATCTGGGGTGCCTGATGCCATCATCCTGTGTGCG CCAGATCTGCGCTGTTATCCTGGAGTCCCCACCCAAAGGAGCCACTATCCCCTACCATCCGAGCCTCTCCCTAGG TACTGTTCTTCTCTCTGCCAACCAGGGCTTCTCTGTCCAGGGTCAGTATGGGGCTGTGACCCCAGCTGAGGTCAC CAAGCTCCAGCAGCTCTCAAGCCATGCGGTCCCCTTTGCCACACCCAGCGTGGTGCCAGGACTGGATCCCGGCAC ACAGACCAGCTCACAGGAGTTCTTGGTTCCCAACGATTTGATTGGCTGTGTGATCGGGCGCCAGGGCAGCAAGAT CAGCGAGATCCGGCAGATGTCAGGGGCACATATCAAGATCGGGAACCAAGCAGAGGGCGCTGGGGAGCGGCATGT CACCATCACTGGCTCTCCGGTCTCCATCGCCCTGGCCCAGTACCTCATCACTGCCTGTCTAGAGACGGCCAAGTC TACCTCTGGGGGGACGCCCAGCTCGGCCCCGCAGACCTGCCCCCTTCTCGCCACCCCTGACGGCCCTGCC CACAGCTCCCCTGGCCTGCGGCACACCCTATGCCATCTCCCTCTCCAACTTCATCGGCCTCAAGCCCATGCC CTTCTTGGCTTTACCACCTGCTTCCCCAGGGCCGCCGCCGGGCTTGGCGGCCTACACTGCCAAGATGGCAGCAGC AGGACCACCAGCAGGGGGCTGCCTCTGCACCCTACCCGCCCAAGGAGACTCCACCCTGGGGTCCCAAACGCCGCT TTCTGGCCCAGGGGTCTGAGCTGCGGCAGCCCCAGGGCAGGGGGCCCTACCTCCTCAGCTCTGTGCTTGGATACA ${\tt CCTGGCCTACTGCATCCTTGTGGGAGTCAGGGAGGAGGGGCCCGTTGGGTAGCTGGGGCCAGGCTTCTCTCCCCAC}$ ${\tt CCCAAAGAGGGGGCACTGCCAGGTAGCTGGGGGAGTGGCATGGGGCAGGGGCCCAGTTCTCAGCAGCAGACACTC}$

PCT/US2003/028547

1270/6881 FIGURE 1181

MPRCPALILYLQSSARITISEGSCPERITTITGSTAAVFHAVSMIAFKLDEDLCAAPANGGNVSRPPVTLRLVIP
ASQCGSLIGKAGTKIKEIREVRGEIYHPQGIRGKGAVVRGVLGLWRPPHLESSEPGQPFSGLWEQPEVAPVLCLQ
TTGAQVQVAGDLLPNSTERAVTVSGVPDAIILCVRQICAVILESPPKGATIPYHPSLSLGTVLLSANQGFSVQGQ
YGAVTPAEVTKLQQLSSHAVPFATPSVVPGLDPGTQTSSQEFLVPNDLIGCVIGRQGSKISEIRQMSGAHIKIGN
QAEGAGERHVTITGSPVSIALAQYLITACLETAKSTSGGTPSSAPADLPAPFSPPLTALPTAPPGLLGTPYAISL
SNFIGLKPMPFLALPPASPGPPPGLAAYTAKMAAANGSKKAERQKFSPY

PCT/US2003/028547

FIGURE 1182

GAATTCCGCCGCTGCTACACGCCTGGTGGGCAGCATGTCGGCAACAGCGGCTGCTCGTAAGCGGGGAAAGCCGGC CTCTGGGGCCGGGGCTGGCGGGGGGGCCAAGCGGCGAAAGGCCGACTCTGCGGGGGACAGGGGCAAATC CAAGGGTGGCGGCAAGATGAATGAGGAGATCTCCAGCGACTCTGAGAGCGAGAGCCTAGCTCCAAGGAAGCCTGA GGAGGAGGAGGAGGAGCTGGAGGAAACTGCACAGGAAAAGAAGCTGCGCTTGGCCAAGCTCTACCTAGAGCA GCTCCGTCAGCAAGAGGAGGAGAAGGCTGAGGCCCGTGCATTTGAGGAGGACCAGGTGGCGGGGCGCCTGAAGGA GGATGTGCTTGAGCAGAGGGGCAGGCTGCAGAAGTTGGTGGCAAAAGAGATCCAGGCCCCAGCCTCAGCTGACAT TCGCGTTTTACGGGGGCACCAGCTCTCTATCACATGTTTGGTCGTCACCCCCGATGACTCAGCCATCTTCTCTGC TGCCAAAGACTGCAGCATCATTAAGTGGAGCGTGGAGAGTGGACGGAAGCTGCATGTGATTCCTCGAGCCAAGAA GGGTGCCGAGGGAAAGCCCCCTGGCCACAGCAGCCACGTCCTCTGCATGGCCATCTCCTCCGACGGCAAGTACCT TGCCTCTGGTGACCGCAGCAAGCTCATTCTCATTTGGGAGGCCCAGAGCTGCCAGCACTTGTACACCTTCACAGG CGTGAAGGTGTGGAATGTGGCAGAGAACTCCTACGTGGAGACGCTCTTCGGACACCAGGACGCTGTGGCTGCACT GGATGCCTTGAGCCGGGAGTGCTGTGACGGCTGGGGGCCGGGATGGGACTGTACGTGTGTGGAAGATCCCCGA GGAGTCCCAGCTTGTCTTCTATGGCCACCAGGGCTCCATCGACTGCATCCACCTAATCAATGAGGAGCACATGGT GTCCGGCGCGGACGATGGCTCTGTGGCCTTGTGGGGTCTCTCCAAGAAGCGACCACTTGCCCTGCAGCGTGAAGC TCACGGGCTGCGGGGAGAGCCAGGCCTGGAGCAGCCCTTCTGGATATCGTCGGTGGCAGCCCTCCTCAACACAGA CCTTGTGGCCACAGGCTCCCACAGCTCCTGTGTGCGGCTTTGGCAGTGTGGGGAAGGCTTCCGGCAGCTTGACCT TCTCTGTGACATCCCCTGGTGGGTTTTATCAACAGCCTCAAGTTCTCCAGCTCTGGGGACTTCCTGGTGGCTGG ${\tt CCGCAGGGTCCCTGTACCCCCAGCTGCTGGTTCC}$ GCCCACCTCTTTGAAGCTT

PCT/US2003/028547

FIGURE 1183

MSATAAARKRGKPASGAGAGAGKRRRKADSAGDRGKSKGGGKMNEEISSDSESESLAPRKPEEEEEELEETA QEKKLRLAKLYLEQLRQQEEEKAEARAFEEDQVAGRLKEDVLEQRGRLQKLVAKEIQAPASADIRVLRGHQLSIT CLVVTPDDSAIFSAAKDCSIIKWSVESGRKLHVIPRAKKGAEGKPPGHSSHVLCMAISSDGKYLASGDRSKLILI WEAQSCQHLYTFTGHRDAVSGLAFRRGTHQLYSTSHDRSVKVWNVAENSYVETLFGHQDAVAALDALSRECCVTA GGRDGTVRVWKIPEESQLVFYGHQGSIDCIHLINEEHMVSGADDGSVALWGLSKKRPLALQREAHGLRGEPGLEQ PFWISSVAALLNTDLVATGSHSSCVRLWQCGEGFRQLDLLCDIPLVGFINSLKFSSSGDFLVAGVGQEHRLGRWW RIKEARNSVCIIPLRRVPVPPAAGS

PCT/US2003/028547

1273/6881 FIGURE 1184A

GCAGCTTAGGCGCCACCAAGGCAAGAACCTAGCCTCCGAGGACCCCAAAAAGAAGAGAGCTCAGAAGCCCTCCCA CATGAGAAGAACATACGAAAGCTACTCCGGGAGGATCAATTGGAGCCTGTTACCAAAGCAGCACAGCAAGAAGA GTTGGAAAGAAGGAAGCGCCTGGAGCAGCAGAGGAAAGATTATGCAGCCCCTATTCCTACTGTTCCGCTGGAGTT CCTCCCTGAGGAAATTGCTTTAAGGGCAAGTGACGGTCCCCAACTGCCTCCTCGGGTCTTGGCCCAGGAAGTCAT TTGTTTGGACAGTAGCAGTGGCAGTGAGGATGAAAAAAGCAGTCGAGATGAGGTGATTGAACTGAGCTCTGGAGA GGAGGACACTCTGCACATTGTGGACAGCAGTGAATCTGTCAGTGAAGATGATGAGGAAGAAGAGAAGAGGGTGGCAC CCATGTCAATGATGTCTTAAACCAGCGTGACGCCCTTGGGCGGGTCCTTGTCAACCTAAACCACCCTCCAGAGGA GGAAAATGTCTTCCTTGCCCCACAGTTGGCACGGGCTGTGAAACCTCATCAGATTGGCGGGATCCGGTTCCTTTA CGATAACCTAGTGGAGTCTCTGGAGAGGTTTAAGACCAGCAGTGGCTTTGGCTGTATTCTGGCCCACAGCATGGG CATTGTGCCGGTTAATACTCTTCAGAATTGGCTGGCAGAGTTCAACATGTGGCTTCCACCTCCTGAAGCCCTCCC GGCTGACAACAAGCCTGAAGAAGTCCAGCCTCGGTTCTTTAAAGTTCACATCTTGAATGATGAGCACAAGACGAT GGCATCTCGTGCTAAAGTGATGGCTGATTGGGTGTCAGAGGGTGGCGTGCTGCTGATGGGGTACGAGATGTACAG ACTCCTCACTCTGAAGAAATCATTTGCCACAGGTAGACCGAAGAAAACCAAGAAGCGTTCTCACCCAGTCATCAT TGATCTAGATGAGGAAGATCGGCAGCAGGAGTTTCGGAGAGAGTTTGAGAAGGCTTTATGCCGCCCTGGCCCTGA TGTAGTAATCTGTGATGAGGGACACCGCATCAAAAACTGCCAGGCCAGCACCTCACAGGCTCTGAAGAATATCCG CTCTCGCCGCCGGGTGGTGCTGACTGGGTACCCTCTGCAAAACAACCTCATTGAGTACTGGTGCATGGTGGACTT TGTGCGCCCAGACTTCCTTGGCACCCGGCAGGAGTTCAGCAACATGTTTGAACGCCCTATCCTGAATGGGCAATG TATTGACAGCACCCCCAGGACGTCCGCCTCATGCGGTACCGGAGCCATGTCCTGCACAGTCTTCTGGAGGGCTT TGTGCAGAGGAGAGGCCACACTGTGCTGAAGATTCATCTCCCTGCCAAGGAAGAAAATGTGATCCTTGTGCGGCT CTCCAAGATCCAGCGAGATTTGTATACACAGTTCATGGATCGCTTCCGGGACTGTGGTAGCAGCGGTTGGCTGGG GCTGAACCCCCTTAAGGCATTCTGTGTGTGTTGCAAGATCTGGAATCACCCTGATGTGCTGTATGAAGCCCTTCA GAAGGAGAGCTTGGCCAATGAGCAGGACCTAGACGTGGAAGAACTTGGCTCTGCAGGGACCAGTGCCCGCTGTCC ACCACAGGGAACAAAAGGCAAGGGAGAGATAGCACCTTGGCTTCCTCGATGGGAGAGGCAACCAATAGCAAGTT CCTACAGGGCGTTGGCTTCAACCCTTTCCAGGAGCGAGGCAACAACATTGTCACATATGAATGGGCCAAGGACCT TCTGACTAATTACCAGACTGGAGTCCTAGAAAACTCTCCCAAGATGGTACTGCTTTTCCACCTGATTGAGGAAAG TGTGAAGCTTGGGGACAAGATCCTTGTGTTTAGCCAGAGTCTTTCCACCTTGGCTCTCATCGAGGAATTCCTTGG AAAACGAGAAGTACCCTGTCCACCTGGTACCGAGGGGCAAGGAGCACAGAAGTGGGTTCGAAACATCAGCTACTT CCGGCTAGATGGTAGCACCCCTGCCTTTGAGAGGGAGCGGCTTATTAATCAGTTCAATGATCCCAGCAACCTCAC CACCTGGCTGTTCCTTCTCTACAAGGGCCGGATGCTTGGGTGTGAATCTGATTGGTGCCAACCGAGTGGTGGT GTTTGATGCTTCCTGGAACCCTTGCCATGATGCCCAGGCAGTATGTCGGGTATACCGTTATGGCCAGAAAAAGCC CTGTTACATCTATCGCCTTGTGGCTGATTACACTCTAGAAAAGAAGATCTATGACCGTCAGATTTCCAAGCAGGG CATGTCAGATCGGGTGGTGGATGATCTAAATCCAATGCTGAACTTCACACGGAAAGAGGTGGAAAACCTACTGCA CTGTCTGAAGTACCCTCACCTCATCACCAAGGAGCCTTTCGAGCATGAGTCATTGCTCTTGAACCGAAAGGATCA CAAGCTAACCAAGGCTGAGAAAAAAGCAGCAAAGAAAAGCTATGAGGAAGACAAACGCACATCAGTCCCCTATAC CCGCCCATCGTATGCGCAGTATTACCCTGCCAGCGATCAGAGCCTGACCAGCATCCCCGCCTTCAGCCAGAGAAA CTGGCAGCCAACTTTGAAGGGTGATGAAAAGCCTGTGGCCAGTGTTCGTCCTGTGCAGTCCACCCCCATCCCCAT CAACTACTTGCAGCGTGCAGGAGTCCTTGTGCAGAAGGTGGTCACCACGACAGATATTGTTATTCCTGGACTCAA CAGCTCCACAGATGTACAGGCAAGAATTAATGCTGGTGAGAGCATCCACATCATCCGTGGGACAAAAGGGACGTA CATCCGTACCAGTGATGGACGGATCTTTGCTGTCCGGGCAACTGGCAAACCAAAGGTTCCTGAAGATGGTCGGAT GGCTGCCTCAGGTTCCCAGGGACCTTCTTGCGAGTCCACAAGCAACGGCAGACACAGTGCCTCATCACCCAAAGC CCCCGACCCTGAGGGGCTGGCCAGGCCCGTCTCTCCTGACAGCCCAGAGATCATCAGTGAGCTTCAGCAGTATGC ACTTATGGACAGCAGTGCTGTTCCCGGGACAGCTCTCGGAACTGAGCCTCGACTAGGGGGTCATTGCCTCAATAG TTCCCTCTTGGTGACTGGCCAGCCCTGTGGTGACAGGCACCCAGTGCTGGACTTAAGGGGCCCACAAGCGAAAGTT GGCCACACCACCTGCTGCCCAGGAGTCATCCCGCCGGCGGTCCAGGAAGGGTCATCTGCCAGCCCCCGTGCAGCC

PCT/US2003/028547

1274/6881 FIGURE 1184B

PCT/US2003/028547

FIGURE 1185

MRRNIRKLLREDQLEPVTKAAQQEELERRKRLEQQRKDYAAPIPTVPLEFLPEEIALRASDGPQLPPRVLAQEVI CLDSSSGSEDEKSSRDEVIELSSGEEDTLHIVDSSESVSEDDEEEEKGGTHVNDVLNQRDALGRVLVNLNHPPEE ENVFLAPQLARAVKPHQIGGIRFLYDNLVESLERFKTSSGFGCILAHSMGLGKTLQVISFIDVLFRHTPAKTVLA IVPVNTLQNWLAEFNMWLPPPEALPADNKPEEVQPRFFKVHILNDEHKTMASRAKVMADWVSEGGVLLMGYEMYR LLTLKKSFATGRPKKTKKRSHPVIIDLDEEDRQQEFRREFEKALCRPGPDVVICDEGHRIKNCQASTSQALKNIR SRRRVVLTGYPLQNNLIEYWCMVDFVRPDFLGTRQEFSNMFERPILNGQCIDSTPQDVRLMRYRSHVLHSLLEGF VQRRGHTVLKIHLPAKEENVILVRLSKIQRDLYTQFMDRFRDCGSSGWLGLNPLKAFCVCCKIWNHPDVLYEALQ KESLANEQDLDVEELGSAGTSARCPPQGTKGKGEDSTLASSMGEATNSKFLQGVGFNPFQERGNNIVTYEWAKDL LTNYQTGVLENSPKMVLLFHLIEESVKLGDKILVFSQSLSTLALIEEFLGKREVPCPPGTEGQGAQKWVRNISYF RLDGSTPAFERERLINQFNDPSNLTTWLFLLSTRAGCLGVNLIGANRVVVFDASWNPCHDAQAVCRVYRYGQKKP CYIYRLVADYTLEKKIYDRQISKQGMSDRVVDDLNPMLNFTRKEVENLLHFVEKEPAPQVSLNVKGIKESVLQLA CLKYPHLITKEPFEHESLLLNRKDHKLTKAEKKAAKKSYEEDKRTSVPYTRPSYAQYYPASDQSLTSIPAFSQRN ${\tt WQPTLKGDEKPVASVRPVQSTPIPMMPRHVPLGGSVSSASSTNPSMNFPINYLQRAGVLVQKVVTTTDIVIPGLN}$ SSTDVQARINAGESIHIIRGTKGTYIRTSDGRIFAVRATGKPKVPEDGRMAASGSQGPSCESTSNGRHSASSPKA PDPEGLARPVSPDSPEIISELQQYADVAAARESRQSSPSTNAALPGPPAQLMDSSAVPGTALGTEPRLGGHCLNS SLLVTGQPCGDRHPVLDLRGHKRKLATPPAAQESSRRRSRKGHLPAPVQPYEHGYPVSGGFAMPPVSLNHNLTTP FTSQAGENSLFMGSTPSYYQLSNLLADARLVFPVTTDPLVPAGPVSSSSTATSVTASNPSFMLNPSVPGILPSYS LPFSQPLLSEPRMFAPFPSPVLPSNLSRGMSIYPGYMSPHAGYPAGGLLRSQVPPFDSHEVAEVGFSSNDDEDKD DDVIEVTGK

PCT/US2003/028547

1276/6881 FIGURE 1186

GCCACCGCCGCCGAGTCCTTTTGTCCAAGATGGCGGCGCCGGGGGGGCGCTGCCTCCTCGGCCGCCTCCGCC GCGGCGGCGCGCACAAGGCCTCTGGCGGCGCCAAGCACCCGGTTCCAGCGCGGGCCCGCGACAAACCCCGCGG CAGCGGAAGCGGCGGGGGCGCATCGCGACGGCCGCGCACCGGGGACGCGAATCACCGCGCGAGTAGCGGGCG CTCCTCGGGCTCCGGCGCGCGGGGGACGCGGCGAAGGCCTCGGGGGACCCGGGCGCCTCCGGCATGTC GCCCGCGCGTCTCCTCTGCCGCCGCCTCCGCCACCGCCTGGGGCCGAGCCCGCGTGTCCCGGCTCATCCGCGGC CGCGCCTGAGTACAAGACGTTGCTCATCAGCAGCTTGAGCCCCGCGCTGCCCGCGAGCACCTCGAGGACCGGCT CTTCCACCAGTTCAAGCGCTTCGGCGAGATCAGCCTCCGCCTGTCGCACACGCCTGAGCTGGGCCGTGTGGCCTA CGTGAATTTCCGGCACCCACAGGACGCACGCGAGGCCCGCCAGCACGCCCTGGCCCGGCAGCTGCTCTACGA CGCCGCTTCCACGCCTCCCCAGGGCCGCCCGCCGCCGACCCGCTCGGCTACCTCCCGCTACACGGAGGCTA CCAGTACAAGCAGCGCTCGCTGCCCCGTCGCCCCCCCCCGGGGAGCCCCGTGCCCGTCACGCCGCCGC AGCCTTCGCCCTGGATGCCGCTGCTGCCGCCGCCGTGGGACTGTCCCGGGAGCGGGCCCTGGACTACTACGGGCT GTACGACGACCGTGGGCGCCCCTATGGCTACCCAGCTGTGTGAGGAGGACCTGATGCCCGAGGATGACCAGCG GGCCACGCGCAACCTCTTCATTGGTAACCTGGACCACAGCGTATCTGAGGTGGAGCTGCGAAGGGCCTTCGAGAA ATATGGCATCATCGAGGAGGTGGTCATCAAGAGGCCTGCCCGTGGCCAGGGCGGTGCCTATGCCTTCCTCAAGTT CCAGAACCTGGACATGGCCCATAGGGCTAAGGTGGCCATGTCGGGCCGAGTGATTGGTCGCAACCCCATTAAGAT GGCCCGAGAGTTTGACCGCTTTGGGAGCATTCGGACCATTGATCACGTCAAAGGAGATAGCTTTGCCTATATTCA GTACGAGAGCTTGGACGCAGCCCAGGCCGCCTGTGCTAAAATGAGGGGTTTTCCCTTGGGTGGACCAGACCGCAG GCTCCGCGTGGATTTTGCCAAAGCAGAGGAGACTCGGTACCCCCAGCAGTACCAGCCCTCGCCACTCCCTGTGCA TTATGAGCTGCTCACAGATGGATACACCCGGCACCGCACCTGGACGCCGACCTGGTGCGGGACAGGACGCCCCC ACACCTTCTGTACTCAGACCGAGACCGGACTTTTTTGGAAGGGGACTGGACCAGCCCCAGTAAAAGCTCTGACCG CCGAAACAGCCTTGAGGGCTACAGTCGCTCAGTGCGCAGCCGGAGTGGTGAGCGTTGGGGGGGCAGATGGAGACCG TGGTTTGCCCAAGCCCTGGGAAGAGGGGGAAACGGAGAAGCCTTTCCAGTGACCGTGGGAGGACAACCCATTC ACCATATGAGGAACGGAGTAGGACCAAGGGCAGTGGGCAGCAGTCAGAGCGGGGCTCCGACCCCTGAGCG CAGCCGCAAGGAGAACCACTCCAGTGAAGGGACCAAGGAGTCCAGCAGCAACTCCCTCAGCAACAGCAGACATGG GGCTGAGGAACGGGGCCACCACCACCACCACGAGGCTGCAGACTCTTCCCACGGGAAGAAGGCAAGAGACAG CGAGCGCAATCACCGGACCACAGAGGCCGAGCCCAAGCCTCTGGAAGAGCCAAAAACACGAGACCAAAAAGCTGAA GAATCTTTCAGAGTACGCTCAGACACTACAGCTGGGTTGGAATGGGCTTCTGGTGTTGAAAAACAGCTGCTTCCC CACGTCTATGCATATCCTAGAGGGGGACCAGGGGGTGATCAGCAGTCTCCTCAAAGACCACACTTCTGGGAGCAA GCTGACCCAGCTGAAGATCGCCCAGCGCCTTCGACTGGACCAGCCCAAGCTTGACGAGGTCACACGACGCATCAA GCAGGGGAGCCCCAACGGCTATGCGGTCCTCTTAGCCACCCAGGCAACCCCCAGTGGGCTTGGCACTGAGGGGAT GCCCACAGTAGAGCCCGGTCTGCAGAGGCGGCTTCTCAGGAACCTGGTCTCCTACTTGAAACAGAAGCAGGCCGC AGGGGTGATCAGCTTGCCAGTGGGGGGGTCCAAGGGCAGAGACGGCACAGGCATGCTCTACGCCTTCCCACCCTG CGACTTTTCCCAGCAGTACCTCCAGTCAGCACTAAGGACATTGGGCAAGCTAGAAGAAGAACACATGGTGATAGT CATCGTCAGAGACACTGCCTAGCCCAAGCCTGTCTTTCCCAGCGTCATGTTTGTGTCACAAAAGCAGTTATTTTA

PCT/US2003/028547

1277/6881 FIGURE 1187

PCT/US2003/028547

1278/6881 FIGURE 1188

ACCAGCCCAGCCTTTCAGTGCAGGCTCCAGCCCTCCACCCCACCCGAGTTGCAGGATGTCGATGACAGACTTGC
TGAACGCTGAGGACATCAAGAAGGCGGTGGGAGCCTTTAGCGCTACCGACTCCTTCGACCACAAAAAGTTCTTCC
AAATGGTCGGCCTGAAGAAAAAGAGTGCGGATGATGTGAAGAAGGTGTTTCACATGCTGGACAAGGACAAAAGTG
GCTTCATCGAGGAGGATGAGCTGGGATTCATCCTAAAAGGCTTCTCCCCAGATGCCAGAGACCTGTCTGCTAAAG
AAACCAAGATGCTGATGGCTGCTGGAGACAAAGATGGGGACGGCAAAATTGGGGTTGACGAATTCTCCACTCTGG
TGGCTGAAAGCTAAGAAGCACTGACTGCCCCTGGTCTTCCACCTCTCT

PCT/US2003/028547

1279/6881 FIGURE 1189

 ${\tt MSMTDLLNAEDIKKAVGAFSATDSFDHKKFFQMVGLKKKSADDVKKVFHMLDKDKSGFIEEDELGFILKGFSPDARDLSAKETKMLMAAGDKDGDGKIGVDEFSTLVAES}$

PCT/US2003/028547

FIGURE 1190

CCGCGCCAGTCGCCTAGCAGGTCCTCTACCGGCTTATTCCTGTGCCGGATCTTCATCGGCACAGGGGCCACTGAG ACGTTTCTGCCTCCTCTTTCTTCCTCCGCTCTTTCTCCCTCGTTTAGTTTGCCTGGGAGCTTGAAAGGA GAAAGCACGGGGTCGCCCCAAACCCCTTCTGCTTCTGCCCATCACAAGTGCCACTACCGCCATCGGCCTCACTAT CTCCTCCTCTCTCCCGACTATTTGGCAAGAAGCAGATGCGCATTTTGATGGTTGGATTGGATGCTGCCAA GACAACCATTCTGTATAAACTGAAGTTAGGGGAGATAGTCACCACCATTCCTACCATTGGTTTTAATGTGGAAAC AGTAGAATATAAGAACATTTGTTTCACAGTATGGGATGTTGGTGGTCAAGATAGAATTAGGCCTCTCTGGAAGCA TTACTTCCAGAATACCCAGGGTCTTATTTTTGTGGTAGATAGCAACGATCGTGAAAGAATTCAGGAAGTAGCAGA GCCAAATGCTATGGCCATCAGTGAAATGACAGATAAACTAGGGCTTCAGTCTCTTCGTAACAGAACATGGTATGT TCAAGCCACTTGTGCAACACAAGGAACTGGTCTGTATGAAGGACTTGACTGGCTGTCAAATGAGCTTTCAAAACG T<u>TAAATGAAATTGGATATCTAACCAAGGACATGTTTGATAAAATTGGTCTAGGCTTGTTACAACAAAATTAGTTT</u> GTATCTTGGTTATTAAACAGTATCTGGGACTGGTTTGGGCAGAATATTAAACTTATTTTGTTGCCAATTATTGTT TACCGAGTATAATGTTGCTATTTAGCAATGTGCTTGGTTTTAAAGAAATTCTCCTTGGGAAAAAAGTATCCTCTT TTTTTGAGCCCCAGACAAATAATGTTTTAAAGTTATCCCCTTGCTACTTTACTGATACCTTTATCATTCCTGAGA GCTTGTACCAGCCAGAGAAAGATCCAAAACACTACTCAGCTCTCTTGCACTGAGGAAATTTTTCCCCCTACATTG ACTCCTGGCCTACATCAGCCAAACTTAACCTTGGTGGGGTTTGGATTTGATAGCCAATTAGTTCTGTGCTGGTTG CAAAGAATTGATATTTAGATGGTTTTTAATACTCAGCAGATTGTCTTCCTTTATATTGTGTCTTTTTTATGTTGC ATGTTGCTTTTGTTATCAGCCTGATTTTTTGCTCAGTATATGATAGTTCTGCTGATGTTTTGTTTATTGGGCAGA CATATCTTCATTAAGAGTTTTTGGAAAACTCACCAAATTCGATGAATACATTTTCTTCTTAACCCATTCGGAATT ATTCCTAATAAAATGATAAAATACGT

PCT/US2003/028547

FIGURE 1191

MGLTISSLFSRLFGKKQMRILMVGLDAAGKTTILYKLKLGEIVTTIPTIGFNVETVEYKNICFTVWDVGGQDRIŖ PLWKHYFQNTQGLIFVVDSNDRERIQEVADELQKMLLVDELRDAVLLLFANKQDLPNAMAISEMTDKLGLQSLRN RTWYVQATCATQGTGLYEGLDWLSNELSKR

PCT/US2003/028547

1282/6881 FIGURE 1192

TCAGGAATCGGGATTAAAAGTTAACCAGCCAGCATCCTTTGCTATAAGGTTGAATGGCGCAAAAAGGCAAGATTGA TGTATAGGTGCACAGCCCCTCTGGAGCCGTGGAGGAGTGCCACGTGTCTGAGCTGGAGCCAGATAAGTATGCTGT TCGCTTCATCCCTCATGAGAATGGTGTCCACACCATCGATGTCAAGTTCAATGGGAGCCACGTGGTTGGAAGCCC CTTCAAAGTGCGCGTTGGGGAGCCTGGACAAGCGGGGAACCCTGCCCTGGTGTCCGCCTATGGCACGGGACTCGA AGGGGGCACCACAGGTATCCAGTCGGAATTCTTTATTAACACCACCCGAGCAGGTCCAGGGACATTATCCGTCAC CATCGAAGGCCCATCCAAGGTTAAAATGGATTGCCAGGAAACACCTGAAGGGTACAAAGTCATGTACACCCCCAT GGCTCCTGGTAACTACCTGATCAGCGTCAAATACGGTGGGCCCAACCACCATCGTGGGCAGTCCCTTCAAGGCCAA GTCGTCTACAGAGACCTGCTATAGCGCCATTCCCAAGGCATCCTCGGACGCCAGCAAGGTGACCTCTAAGGGGGC TGCTGATCGGGGTCCATGGGCCCACCACCCCTGCGAGGAGGTCTCCATGAAGCATGTAGGCAACCAGCAATACA GCCCTTTCATGTCACAGTGCCTTAAAACAGTTTTCTCAAATCCTGGAGAGAGTTCTTGTGGTTGCTTTTGTTGC TTGTTTGTAATTCATTTTATACAAAGCCCTCCAGCCTGTTTGTGGGGCTGAAACCCCCATCCCTAAAATATTGCTG TTGTAAAATGCCTTCAGAAATAAGTCCTAGACTGGACTCTTGAGGGACATATTGGAGAATCTTAAGAAATGCAAG CTTGTTCAGGGGGCTGAGAAGATCCTGAGTACACTAGGTGCAAACCAGAACTCTTGGTGGAACAGACCAGCCACT ACTCTTCAGCATTTATGAAACAAGGCTAGGGGAAGATGGGCAGAGAAAAAGGGGACACCTAGTTTGGTTGTCATT TGGCAAAGGAGATGACTTAAAATCCGCTTAATCTCTTCCAGTGTCCGTGTTAATGTATTTGGCTATTAGATCACT AGCACTGCTTTACCGCTCATCGCCAACACCCCCATGCTCTGTGGCCTTCTTACACTTCTCAGAGGGCAGAGT GGCAGCCGGGCACCCTACAGAAACTCAGAGGGCAGAGTGGCAGCCAGGCCCACATGTCTCTCAAGTACCTGTCCC CTCGCTCTGGTGATTATTTCTTGCAGAATCACCACACGAGACCATCCCGGCAGTCATGGTTTTGCTTTAGTTTTC CAAGTCCGTTTCAGTCCCTTCCTTGGTCTGAAGAAATTCTGCAGTGGCGAGCAGTTTCCCACTTGCCAAAGATCC CTTTTAACCAACACTAGCCCTTGTTTTTAACACACGCTCCAGCCCTTCATCAGCCTGGGCAGTCTTACCAAAATG TGCGGGTCTTTGGCCTGAAAGTTGGGAATGGTTGGGGGAGAAAGGGCAGCAGCTTATTGGTGGTCTTTTCACCA AGACCTGAGCTGGCTTTGGAATGAGGTTAAAGTGTCAGGGACGTTGCCTGAGCCCAAATGTGTAGTGTGGTCTGG GCAGGCAGACCTTTAGGTTTTGCTGCTTAGTCCTGAGGAAGTGGCCACTCTTGTGGCAGGTGTAGTATCTGGGGC GAGTGTTGGGGGTAAAAGCCCACCCTACAGAAAGTGGAACAGCCCGGAGCCTGATGTGAAAGGACCACGGGTGTT GTAAGCTGG

PCT/US2003/028547

FIGURE 1193

 ${\tt ATAGAGGACACGACCAAG} \underline{{\tt ATG}} {\tt GCGGCGGTGTCTGGCTTGGTGCGGAGACCCCTTCGGGAGGTCTCCGGGCTGCTG}$ AAGAGGCGCTTTCACTGGACCGCCGGCTGCGCTGCAGGTGACAGTTCGTGATGCTATAAATCAGGGTATGGAT GAGGAGCTGGAAAGAGATGAGAAGGTATTTCTGCTTGGAGAAGAAGTTGCCCAGTATGATGGGGCATACAAGGTT AGTCGAGGGCTGTGGAAGAAATATGGAGACAAGAGGATTATTGACACTCCCATATCAGAGATGGGCTTTGCTGGA ATTGCTGTAGGTGCAGCTATGGCTGGGTTGCGGCCCATTTGTGAATTTATGACCTTCAATTTCTCCATGCAAGCC ATTGACCAGGTTATAAACTCAGCTGCCAAGACCTACTACATGTCTGGTGGCCTTCAGCCTGTGCCTATAGTCTTC AGAGGGCCCAATGGTGCCTCAGCAGGTGTAGCTGCCCAGCACTCACAGTGCTTTGCTGCCTGGTATGGGCACTGC CCAGGCTTAAAGGTGGTCAGTCCCTGGAATTCAGAGGATGCTAAAGGACTTATTAAATCAGCCATTCGGGATAAC AATCCAGTGGTGGTGCTAGAGAATGAATTGATGTATGGGGTTCCTTTTGAATTTCCTCCGGAAGCTCAGTCAAAA GATTTTCTGATTCCTATTGGAAAAGCCAAAATAGAAAGGCAAGGAACACATATAACTGTGGTTTCCCATTCAAGA CCTGTGGGCCACTGCTTAGAAGCTGCAGCAGTGCTATCTAAAGAAGGAGTTGAATGTGAGGTGATAAATATGCGT ACCATTAGACCAATGGACATGGAAACCATAGAAGCCAGTGTCATGAAGACAAATCATCTTGTAACTGTGGAAGGA GGCTGGCCACAGTTTGGAGTAGGAGCTGAAATCTGTGCCAGGATCATGGAAGGTCCTGCGTTCAATTTCCTGGAT GCTCCTGCTGTTCGTGTCACTGGTGCTGATGTCCCTATGCCTATGCAAAGATTCTAGAGGACAACTCTATACCT ${\tt CAGGTCAAAGACATCATATTTGCAATAAAGAAAACATTAAATATT} \underline{{\tt TAG}}{\tt TTGGACTTGAATATCAAGTCGTTGAA$ ATTTATTTGAAATACTTGCTGGCACTGCACCTGGATTTGTACTGCAAGACCTGACTATTCATAACGGAAAACGAT TTCTAAAGCAACAGCAGGTATTTTTGTACAGGGAAGTTTAAATGTGTTTGTGTATGGAAAACTCTCCACTCTCCT CCCCTAGATGCCATGCTTCCTTTTGTCTGTTACGGTTGCCATGTTCTTTGAATAACAAATTATAACATTTTAT CCTCTCTCACCACAAGGACAAAGTATGGATGTGGCAGAGTCCTCATGAAAGATGTATCCAAACAAGATAACTTAT

PCT/US2003/028547

FIGURE 1194

MAAVSGLVRRPLREVSGLLKRRFHWTAPAALQVTVRDAINQGMDEELERDEKVFLLGEEVAQYDGAYKVSRGLWK KYGDKRIIDTPISEMGFAGIAVGAAMAGLRPICEFMTFNFSMQAIDQVINSAAKTYYMSGGLQPVPIVFRGPNGA SAGVAAQHSQCFAAWYGHCPGLKVVSPWNSEDAKGLIKSAIRDNNPVVVLENELMYGVPFEFPPEAQSKDFLIPI GKAKIERQGTHITVVSHSRPVGHCLEAAAVLSKEGVECEVINMRTIRPMDMETIEASVMKTNHLVTVEGGWPQFG VGAEICARIMEGPAFNFLDAPAVRVTGADVPMPYAKILEDNSIPQVKDIIFAIKKTLNI

PCT/US2003/028547

FIGURE 1195

 $\tt GTCAGCCGCTGTCCCCTTAGCCGCG\underline{\textbf{ATG}}\texttt{CCGCTGGAGAACCTGGAGGAGGGGGGGGTCTGCCCAAGAACCCCGACTT}$ GCGTATCGCGCAGCTGCCGCTCAGCCTGCCCGAGCACCGCGGAGACGCTGCCGTGCGCGACGAGCTGAT GGCGGCCGTCCGCGATAACAACATGGCTCCTTACTATGAAGCCTTGTGCAAATCCCTCGACTGGCAGATAGACGT GGACCTACTCAATAAAATGAAGAAGGCAAATGAAGATGAGTTGAAGCGTTTGGATGAGGAGCTGGAAGATGCAGA GAAGAATCTAGGAGAGAGCGAAATTCGCGATGCAATGATGGCAAAGGCCGAGTACCTCTGCCGGATAGGTGACAA AGAGGGAGCTCTGACAGCCTTTCGCAAGACATATGACAAAACTGTGGCCCTGGGTCACCGATTGGATATTGTATT CTATCTCCTTAGGATTGGCTTATTTTATATGGATAATGATCTCATCACACGAAACACAGAAAAGGCCAAAAGCTT AATAGAAGAAGGAGGAGACTGGGACAGGAGAAACCGCCTAAAAGTGTATCAGGGTCTTTATTGTGTGGCTATTCG TGATTTCAAACAGGCAGCTGAACTCTTCCTTGACACTGTTTCAACATTTACATCCTATGAACTCATGGATTATAA AACATTTGTGACTTATACTGTCTATGTCAGTATGATTGCCTTAGAAAGACCAGATCTCAGGGAAAAGGTCATTAA AGGAGCAGAGATTCTTGAAGTGTTGCACAGTCTTCCAGCAGTTCGGCAGTATCTGTTTTCACTCTATGAATGCCG TTACTCTGTTTTCTTCCAATCATTAGCGGTTGTGGAACAGGAAATGAAAAAGGACTGGCTTTTTGCCCCTCATTA TCGATACTATGTAAGAGAAATGAGAATTCATGCATACAGTCAGCTGGTGAATCATATAGGTCATTAACCCTTGG CTATATGGCAGAAGCGTTTGGTGTGGGGAATTCATTGATCAGGAACTGTCCAGGTTTATTGCTGCCGGGAG ACTACACTGCAAAATAGATAAAGTGAATGAAATAGTAGAAACCAACAGACCTGATAGCAAGAACTGGCAGTACCA $AGAAACTATCAAGAAAGGAGATCTGCTACTAAAÇAGAGTTCAAAAACTTTCCAGAGTAATTAATATG<math>\underline{TAA}$ AGCCA TGTAACTAACAAAGGATTTGCTTTAGAGATAATTATTTGGAATTTTTATAGCTTACTTCACAATGTGCCCAGGTC AGCTGTATAAAATAAATACTGCATTGTTTTC

PCT/US2003/028547

FIGURE 1196

MPLENLEEGLPKNPDLRIAQLRFLLSLPEHRGDAAVRDELMAAVRDNNMAPYYEALCKSLDWQIDVDLLNKMKK ANEDELKRLDEELEDAEKNLGESEIRDAMMAKAEYLCRIGDKEGALTAFRKTYDKTVALGHRLDIVFYLLRIGLF YMDNDLITRNTEKAKSLIEEGGDWDRRNRLKVYQGLYCVAIRDFKQAAELFLDTVSTFTSYELMDYKTFVTYTVY VSMIALERPDLREKVIKGAEILEVLHSLPAVRQYLFSLYECRYSVFFQSLAVVEQEMKKDWLFAPHYRYYVREMR IHAYSQLLESYRSLTLGYMAEAFGVGVEFIDQELSRFIAAGRLHCKIDKVNEIVETNRPDSKNWQYQETIKKGDL LLNRVQKLSRVINM

PCT/US2003/028547

FIGURE 1197

PCT/US2003/028547

FIGURE 1198

GCTCAAGTGGCCAAGGCAAGATGGGTCAAAGTCAGAGTGGTGGTCATGGTCCTGGAGGTGGCAAGAAGGATGACA AGGACAAGAAAAGAAATATGAACCTCCTGTACCAACTAGAGTGGGGAAAAAGAAGAAGAAAACAAAGGGACCAG ATGCTGCCAGCAAACTGCCACTGGTGACACCTCACACTCAGTGCCGGTTAAAATTACTGAAGTTAGAGAGAATTA AGGAAAGATCAAAAGTGGATGATCTGAGGGGGACCCCGATGTCAGTAGGAACCTTGGAAGAGATCATTGATGACA ATCATGCCATCGTGTCTACATCTGTGGGCTCAGAACACTACGTCAGCATTCTTTCATTTGTAGACAAGGATCTGC CCCTGGTCACAGTGATGAAGGTAGAAAAGGCCCCCCAGGAGACCTATGCAGATATTGGGGGGGTTGGACAACCAAA TTCAGGAAATTAAGGAATCTGTGGAGCTTCCTCTCACCCATCCTGAATATTATGAAGAGATGGGTATAAAGCCTC CTAAGGGGGTCATTCTCTATGGTCCACCTGGCACAGGTAAAACCTTGTTAGCCAAAGCAGTAGCAAACCAAACCT CAGCCACTTTCTTGAGAGTGGTTGGCTCTGAACTTATTCAGAAGTACCTAGGTGATGGGCCCAAACTCGTACGGG AATTGTTCCGAGTTGCTGAAGAACATGCACCGTCCATCGTGTTTATTGATGAAATTGACGCCATTGGGACAAAAA TTGATTCTAGGGGAGATGTGAAAGTTATCATGGCCACAAACCGAATAGAAACTTTGGATCCAGCACTTATCAGAC CAGGCCGCATTGACAGGAAGATTGAGTTCCCCCTGCCTGATGAAAAGACGAAGAAGCGCATCTTTCAGATTCACA CAAGCAGGATGACGCTGGTGATGTAACCCTGGACGACCTGATCATGGCTAAAGATGACCTCTCTGGTGCTG ACATCAAGGCAATCTGTACAGAAGCTGGTCTGATGGCCTTAAGAGAACGTAGAATGAAAGTAACAAATGAAGACT TCAAAAAATCTAAAGAAAATGTTCTTTATAAGAAACAGGAAGGCACCCCTGAGGGGCTGTATCTCTAATGAACCA TGGCTGTCATCAGGAAAATGGTTGGGAGATTTCTCAGTCCCTGAAAGGGATGAGGCTGGGGGGAGTTGCCCAGAGG AATCCCTGTTCCCACTGATTTTTATTAGCAAAACATCCTGTGTCTTTTGGAGTACGATGTGTAAGTGCCCATTGG GTGGCCTGTTGGTCACTGTGCAGCAGTCTGCTTCCCAATAAAGCGTGCTCTTTCACAA

PCT/US2003/028547

FIGURE 1199

ATGCCTTCAAAGGAAAAGCAAGGGACACTCACCTTGCAAAACCATCAAAACTATTCCCACAGACGCCACATGAGC CCCCATTTATCTGACTTAAAAGAAGCAGGGTCTGCTGGGATTCGAATCCTCTGGTTCCAGAGAGAAGCTCTTT CAAAGACTGGATTCTGGCCCACAAAAGAAGGTTCCTGCTTACTGGAATCAAGAGGTCAAAGATTTTTCTGAATCA TGCATCCACGGAGAAGAGCCCATTAGGGCTATTCCAGCAGACAGCAGTAAGGATGTCCATGAGCTTTATGTTGTT GTTGGGAGCTGGGATTCTACTCTTCCAGAAGAATATGACCTCAAAAGGAGCCACCACAGAACGAGCTCGGCACCC ATCTACGAATGTATTGCTAAGGATCATTGGGGATGGGGTGACCCAGAAGTGAACTGGCTCCATGATCCATTAAAC AATCACCCTGAAATCCACAGTGCCAGTCAACTAATGGGGGCTTGGAGCCATCATTAGGTCACTGGAAAATGATATC GGCACCTGCCATCCACATCAAATCACAGAGCCATGCTTAAAAGGGCCAGGTGGATGACTTATGTGGAAGAAGTG AGCCGGGTGAGGATTTCTACTTCGAGAAACCTTGCTCGAAGCGCTTTCATCATTCTCTCCTACACAACAACCCT GAACTCTTAGAAGCAGCTCTTGGCACAGGAGCCTCCAACCCGTTTTTCAGCCGGCTTTCTCTACTTGTTTCTCAT TCCATGATCACAGAAAACAGCTCCATTAAGACTCTTTTCAGGTCTACCAAAGAGCTAGTGATTGCACTCAATCGA TGTTTCTTCGGCATTACTCAAAGTGCAGCTACACTCAGCCCACAGCTTCACATCAGATTTATCAGCAGAAACAA AAGAAGTACTTGAAATTGCCACTTACAACGTTTATGAGTAAACTGGAATCCAAAGTCTGGCCTCTAGCCAAGCGG TTACGCCAGTGGCCTGACTCATATACAAAGAAGTTTGAGCACAGAATCTACCCCATCACATTTTCTGTTGGAAAC GCCTCCTACGTTTACCTGTCCATGTCTTACTACTTTGACCGCGATGATGTGGCTTTGAAGAACTTTGCCAAATAC TTTCTTCACCAATCTCATGAGGAGGGAACATGCCGAGAAACTGATGACGTTGCAGAACCAACGAGGTGGCCGA GACCCCCATTTGTGTGACTTCATTGAGACACATTACCTGAATGAGCAGGTGAAAGCCATCAAAGAATTGGGTGGC CACGTGACCAACTTGTGCAAGATGGGAGCACCCGAATCTGGCTCGGCAGAATATCTCTTTGACAAGCACACGCTG GGAGACAGTGATAACGAAAGCTAA

PCT/US2003/028547

FIGURE 1200

MPSKEKQGTLTLQNHQNYSHRRHMSPHLSDLKEAGSAGIRILWFQREKLFQRLDSGPQKKVPAYWNQEVKDFSES CIHGEEPIRAIPADSSKDVHELYVVVGSWDSTLPEEYDLKRSHHRTSSAPIYECIAKDHWGWGDPEVNWLHDPLN NHPEIHSASQLMGLGAIIRSLENDIFLEVDTGFTILRAEGLREEQPPGHGGTCHPTSNHRAMLKRARWMTYVEEV SRVRISTSRNLARSAFIILSYTTNPELLEAALGTGASNPFFSRLSLLVSHSMITENSSIKTLFRSTKELVIGPKD ARRDFQVVSRGSADFWRKLASSDGSICLLSIGKPELIRLIQLIK WO 2004/030615 PCT/US2003/028547

FIGURE 1201

PCT/US2003/028547

FIGURE 1202

GTCGGCGTGTCGAGTGGCTCTTCCTGGCTGCTGAGGCGGGTTAAGGTCTGAGGGTCTTGTGGGGCCCACGGCGCTG ATCACCAGGTGTTTGGCTTGGTCGGTTCTTATTTCTCGCCTGGCAATGGCGACGTACACCTGCATAACTTGCCGG GTGGCGTTCCGCGACGCGGACATGCAGCGGGCCCACTATAAGACGGACTGGCACCGCTACAACCTGCGGCGGAAG GTGGCCAGCATGGCCCCAGTGACCGCCGAGGGCTTCCAGGAGCGAGTGCGGGCGCAGCGGGCCGTCGCGGAGGAG GAGAGCAAGGGCTCGGCCACCTACTGCACCGTTTGCAGTAAGAAGTTTGCCTCTTTCAACGCCTACGAGAACCAC GAAAAGAACTTGGAGAAAGGACTGGGCGTGGACAGTGTGGACAAGGATGCCATGAACGCGGCCATCCAGCAGGCC ATCAAGGCCCAGCCGTCCATGTCTCCCAAGAAGGCGCCCCCAGCGCCTGCAAAGGAGGCCAGGAATGTCGTGGCC GTGGGTACTGGTGGCCGTGGGACCCACGACCGAGACCCGAGTGAGAAACCACCCCGGCTCCAGTGGTTTGAACAG GAAGATATTGATTCTGATGAAGAATTGGAATGTGAGGATACTGAAGCAATGGACGATGTGGTGGAGCAGGATGCA GAGGAGGAAGAGGCTGAGGAAGGCCCACCCTTGGTGCCATCCCTATCACGGACTGCTTATTTTGTTCCCATCAT TCCAGCTCGCTGATGAAGAATGTGGCTCACATGACCAAAGACCACAGTTTCTTTATTCCTGATATAGAATATCTT TCAGATATTAAGGGACTGATTAAATACTTGGGAGAGAAAGTTGGTGTTGGCAAGATTTGCTTGTGGTGCAACGAG GACCCCAATAAGGCTGAGGAGTTGCCCTCAGAAAAGAACTTGGAATATGATGATGAAACCATGGAATTGATTCTG CCTTCTGGTGCCAGAGTGGGTCATCGCTCCTTGATGAGATACTACAAACAGCGATTTGGCTTGTCAAGAGCTGTG GCAGTTGCCAAAAATCGGAAGGCCGTGGGCCGAGTACTTCAGCAGTACAGAGCCCTGGGATGGACTGGCAGCACA GGAGCGGCTCTTATGCGAGAGCGAGACATGCAGTATGTCCAAAGGATGAAATCAAAATGGATGCTGAAGACAGGA ATGAAGAACAATGCCACCAAGCAGATGCACTTTCGGGTCCAAGTGAGATTCTGAGAGTCTGCTGGGATTGAGCAA TCATCTCCTGCCCAAGT1TCCTCCTTGCCCTGAGGACCAGTGAAAGACAGATCATAGGAGAGACCCTTTTGCTGC TACTTCATTCGTTCTGACCTAATAATAAAAGTTAGAACCAT

PCT/US2003/028547

1293/6881 FIGURE 1203

GCAGACGCCATTATCCTCTGTTTCTCTGCTGCACCGACCTCGACGCCTTGCCTGTGGCCCACTTGTTCACTGACT TAATAACTGATTGGTGTGCCCATTTAATAAAAGAATATGTAAACTGAACAGCCGGAAGAAACCTTCCCGAACACT GAAACCAATGGTGAATTTGGTAAACACCCTGCAGAAGATATGGAAGAGTAACAAGCATTTAAAAGATCTAGAAAC ${\tt ACTGATGAGATGGTTGAATTACGCATTCTGCTTCAGACCAAGAATGCTGGGGCAGTGATTGGAAAAGGAGGCAAG}$ AATATCAAGGCTCTCCGTACAGACTACAATGCCAGTGTTTCAGTCCCAGACAGCAGTGGCCCCGAGCACATATTG AGTATCAGTGCTGGTATTGACACAATTGGAGAAATTCTGAAGAAAATCATCCCTACCTTGGAAGAGTACCAACAC TATAAAGGAAGTGACTTTGACTGCGAGTTGAGGCTGTTGATTCATCAGAGTCTAGCAGGAGGAATTATTGGGGTC GAAGGTGCTAAAATCAAAGAACTTCGAGAGAACACTCAAACCACCATCAAGCTTTTCCAGGAATGCTGTCCTTAT TCCACTGACAAGAGTTGTTCTTATTGGAGGAAAACCCGATAGGGTTGTAGAGTGCATAAAGATCATCCTTGATCT TATATATGAGTCTCCCATCAAAGGACGTGCACAGCCTTATGATCCCAATTTTTATGATGAAACCTATGATTATGG TGGTTTTACAATTATGTTTGATGACCGCTGTGGACGCCCAGTGGGATTTCCCATGCGGGAAGAGGTGGTTTTGA CAGAATGCCTCCTGGTCAGGGTGGGCGTCCCATGCCTCCATCTAGAAGAGATTATGATGATATGAGCCCTCGTCA ACCACCACCTAGAGGGGGAGACCTCATGGCCTATGACAGAAGAGGGGAGACCTGGAGACTGTTACCATGGCATGGT TGGTTTCAGTGCTGATGAAACTTGGGACTCTGCAATAGATACATGGAGCCCATCAGAATGGCAGATGGCTTATGA ACCACAGGGTGGCTCCAGATATGATTATTCCTATGCAGGGGGTCGTGGCTCATATGGTAATCTTGGTGGACTTAT TATTACTACACAAGTAACGATTCCCAAAGATTTGGCTGGATCTATTATTG

PCT/US2003/028547

FIGURE 1204

PCT/US2003/028547

1295/6881 FIGURE 1205

ATGATCAGGTGTGATAAGTGCTGTAATGAAGGCAATTACAAGGAGAGGATATTTGAAATCATTGCTGTGGAGGGT
GAGAGTGCGAACAAGGAAGTTGTGGTAGCATTGCTAGACAGTTTTGAGAGCCCAGCCCAGAGCTTAAGGTTATT
GCTGAATTAAGCCACGCCTCATTGCTACGATTTCAGAGTACCCTGGTAATAGCTGAGCATGCAAATGATTCCCTA
GCACCCATTACTTTAAATACCATTACTGCAGCCACACGCCTTGGAGGTGAAGTGTCCTGCTTAGTAGCTGGAACC
AAATGTGACAAGGTGGCACAAGATCTCTGTAAAGTAGCAGGCATAGCAAAAGTTCTGGTGGCTCAGCATGATGTG
TACAAAGGCCTACTTCCAGGTGAGGTTTTCCAGTAG

PCT/US2003/028547

FIGURE 1206

PCT/US2003/028547

FIGURE 1207

MKVELCSFSGYKIYPGHGRRYARTDGKVFQFLNAKCESAFLSKRNPRQINWTVLYRRKHKKGQSEEIQKKRTRRÄ VKFQRAITGASLADIMAKRNQKPEVRKAQREQAIRAAKEAKKAKQASKKTAMAAAKAPTKAAPKQKIVKPVKVSA PRVGGKR

PCT/US2003/028547

1298/6881 FIGURE 1208

GCTCCTCCACAGGAGGCCTACACGCCGCCGCTTGTGCTGCCGCCATGTCGCTAGTGATCCCTGAAAAGTTCCAGC
ATATTTTGCGAGTACTCAACACCAACATCGATGGGCAGCGGAAAATAGCCTTTGCCATCACTGCCATTAAGGGTG
TGGGCCGAAGATATGCTCATGTGGTGTTGAGGAAAGCACAGACCTCACCAAGAGGGCGGGAGAACTCACTG
ATGATGAGGTGGAACGTGTGATCACCGTTATGCAGAATCCACGCCAGTACAAGATCCCAGACTGGTTCTTGAACA
GACAGAAGGATGTAAAGGATGGAAAATATAGCCAGGTCCTAGCCAATGGTCTGGACAACAAGCTCCGTGAAGACC
TGGAGCGACTGAAGAAGATTCGGGCCCATAGAGGGCTGCGTCACTTCTGGGGCCTTCGTGTCCGAGGCCACA
CCAAGACCACTGGCCGCCGTGGCCGCACCGTGGGTGTCCCAAGAAGAAATAAGTCTGTAGGCCTTGTCTGTTAA
TAAATAGTTTATATACC

PCT/US2003/028547

FIGURE 1209

ACCGCGGGGCCTGGGTCCCAGCCGGCAGCAGAGAGCTGGTCGCCCACCCCAAGCTACTGCTGCCGCCTGGCT TCCCGGGCCCTGCTTACGAGGAGGAGGGCACTCCCCTGCGCTACCAGCGTCTGGTGCCCTCTCGCAGCCGCATCG TGCGGACGCCCTCCCTGAAGGACAGCCCGGCAGGCCGGGGGCTCAGCAAGGCCGCCGTGTCCGAGGAGCTCAAGT GGAGATCGCCTGACGGGGCCCCTGTGCAAGTCTTTGTACCTGAAAAAGGAGAGATCATCAGCCAGGTGTAACTCT GCGCCCCACGCTGGAAAAAACTGTTTCATAGAGGGGCTGGGCTGAGACCCCCCACCCCTGAGTGCCTCTTTCAG AGAAGCCCTGACCTAAGGATTTATATATGTGGATTGTCCTCAATACCCCTGTGATATGATTATGTTTTATCCCCC AGAGTTTGGCCTACTGGACTŢAAGGCCTTGCCTGTCTGACTGACAGCCTCTATCTCCTTATATAAGACAAGTGGC AGGGGACGAGTGAAGCAGAGTGGGCCACCTTGGGAGTTCTCCAACACTCTGTGCTCTGGTTCTAAGAAATTCCCT GGGGAACTGCCCTGGCCCTCCTGTCCCACTATTGCTGGAGGCTGGACATGGTACATACTCATGCACATGACTCT CCCCCATTTCCCAGGTCTCTGGGTACCCCAGCCTGGGCTGGGGGAGAATCTCTTCCCCCCTTTCTAATGTGCTCTG TGATGCACACCAAGTGGTAGGTCAAAGGTCAGTATATCCCGGTGGTGTATTGTCTTGCTAGACCCTGCTATTT TCCTGACCCCTAAATCCTCTTTAGGGACCCAGTCACTATACCCTGTCTATGCCCTGTGGGCTCCCAGACCCCTG AGCTTTGAGTCAGTGGCATCACGGTTTGTAGCCTCAGGGGGGTCCGGCTGGGGGGCTGATCCATGCTTGTGGTTAGT GGACAGCAGCCACCCTTTGACAGCTACCTCTGGGCATCTCAAGGGCTTGCAGCCCCACTGCTCCTTAACATTT TGTTTGTTTTTTGAGATGGAGTCTCGCTCTGTCGCCCAGGCTGGAATGCAGTAGCAAGATTTCGGCTCACTG CAACCCCCGTCTCCCGGGTTCAAGCGAATCTCCTGCCTCAGCCTTCCGAGTAGCTGGGATTACAGGCAAGCACCA CCATGCCTGCTAATTTTTTATTTTTAGTAGAGATGGGGTTTCATCATGTTGGCCAGGCTGGTCTCGAACTCCTGA ${\tt CCTCAAGTGATCCACCTGCCTTGGCCTTCAAAGTGCTGGGATTACAGGCATGAGCCACCTGGCCCTTCT}$ $\mathtt{AACGTTTTTCATCATAGTCCCAAAAACCAATACTTTACAAGTGGTTTTGGAAAGGCACCACTTTTGTGGC\mathtt{ATG}\mathtt{C}$ TCTGGTTGGGAGAGGGAGTCACAGTTCCTACTCCCCCCACCAGCTATGCTTCTGCTCTGAGAAGGTGGTTATTTA CAGCTGCAGCGACTGGAGCAAGTCTGGAAGCTGCCTGTGCTAAGACCACCCAGCTGTCCCTGGGTTCTCATCCTA ${\tt GGGCCTTCTTTGCTTCCAGGTCAGGGGACCTGCTTCAA}$ AGAGCTGAGTTCTGACTTCACCTGTGCAGAACTCTCTGCCCCCATGTTACCTGGACTGGAACAGACTGTGAATAT GCCGATTGCACAAGGGTGCCAAGGGAAGACCCAGGATGGCCCATCAAAGGAACCTGGGGGAGGATGCAGGAGGCT GAAGGGATGCACCTGGCATTTCTCTCACTGTGCTCTTACCGCATCAGCAACCCCCAACTTTTGGGCCTACTCTGC CCCCCATGCGTGAATACCCTGCTTGGATGCTGTGCTTTTCCGGTTTGTCTCTAAGCCCCTTTCTCCAGGGCATGT TGGTTTCCCTGGCCTCTCAGTGTCCTAACTGGAGCCCAGAGTGCCTTGTACTGAGCCAGGAGACGGCTGAGCACT GGCCCTCCACACCTAAGCGTCCTTTACATTAACTTATTGGTCTTGTATAACACCTGGTGCCATTGCCAAGTGGCT GTGTCCTCAGCTACAGAGCTGGAATTGTGTGGGGGTTTAGTGCTAAATACTTCAATAAAGTCTGTTTTTTGTGATT GGCTG

PCT/US2003/028547

1300/6881 FIGURE 1210

 ${\tt MFWLGEGVTVPTPPTSYASALRRWLFIQTWTYSLPRADEMLNFLWGHSLIVPAAATGASLEAACAKTTQLSLGSHPRAFFASRSGDLLQ}$

PCT/US2003/028547

1301/6881 FIGURE 1211

ATTAATCCCAGTGCTTTTACGCCCGGAAACAAGAGACTAAGCCAGACTATGGGGGGAAAGGGAGATAAGAAGGAT CCTGGAACTTTAAAGAGGGAAAGAGTGAGATTCAGAAATCGCCAGGACTGGACTTTAAGGGACGTCCTGTGTCAG CACAAGGGACTGGCACACACAGACACAGAGACCGAGGAGAAACTGCAGACAAATGGAGATACAAAGACTTAGAA GGACAGCTCCTTTCACCTCATCCTACTTGTCCAGAAGTGTGTGGATCAGAACCCCACCCCCATGCCACTATTAGA GGCAGCCACGGAGGACGGAAAGTGCCTTTGGTTTCTCCGGACAGCAGTAGGCCAGCTCGGTTTCTGAGGCACACT GGGAGGTCTCGCGGAATTGAGAGATCCACTCTGGAGGAACCAAACCTTCAGCCTCTCCAGAGAAGGAGGAGTGTG CCCGTGTTGAGACTAGCTCGCCCAACAGAGCCGCCAGCCCGCTCGGACATCAATGGGGCCGCCGTGAGACCTGAG CAAAGACCAGCAGCCAGGGGCTCTCCGCGTGAGATGATCAGAGATGAGGGGTCCTCAGCTCGGTCAAGAATGTTG CGTTTCCCTTCGGGGTCCAGCTCTCCCAACATCCTTGCCAGCTTTGCAGGGAAGAACAGAGTATGGGTCATCTCA GCCCCTCATGCCTCGGAAGGCTACTACCGCCTCATGATGAGCCTGCTGAAGGACGATGTGTACTGTGAGCTGGCG GAGGGCCAGATCCTGGAGCAGCCCCTGGACCCTAGCCTCATCCCTAAGCTGATGAGCTTCCTGAAGCTGGAGAAG GGCAAGTTTGGCATGGTGCTGCAGAAGAAGACGCTGCAGGTGGAGGAGCGCTATCCATATCCCGTTAGGCTGGAA GCCATGTACGAGGTCATCGACCAAGGCCCCATCCGTAGGATCGAGAAGATCAGGCAGAAGGGCTTTGTCCAGAAA TGTAAGGCCTCTGGTGTAGAGGGCCAGGTGGTGGCGGAGGGGAATGACGGTGGAGGGGGAGCAGGAAGGCCAAGC GCCCCAGCCACACAGTGACTCGGTCCACGTCCCGGGCGGTAACAGTTGCTGCAAGACCTATGACCACCACTGCC TTTCCCACCACGCAGAGGCCCTGGACCCCTCACCCTCCCACAGGCCCCTACAACCACTGAGGTGATCACTGCC AGGAGACCCTCAGTTTCAGAGAATCTTTACCCTCCATCCCGGAAGGATCAGCACAGGGAGAGGCCACAGACAACC AGGAGGCCCAGCAAGGCCACCAGCTTGGAGAGCTTCACAAATGCCCCTCCCACCACCATCTCAGAACCCAGCACA AGGGCTGCTGGCCCAGGCCGTTTCCGGGACAACCGCATGGACAGGCGGGAACATGGCCACCGAGACCCAAATGTG GTGCCAGGTCCTCCCAAGCCAGCAAAGGAGAAACCTCCCAAAAAGAAGGCCCAGGACAAAATTCTTAGTAATGAG TATGAGGAGAAGTATGACCTCAGCCGGCCTACTGCCTCTCAGCTGGAGGACGAGCTGCAGAGTCCCAAGAAGTCA GTGGCCGACCTGCTGGGGTCCTTTGAAGGCAAACGAAGACTCCTTCTGATCACTGCTCCCAAGGCTGAGAACAAT ATGTATGTGCAACAACGTGATGAATATCTGGAAAGTTTCTGCAAGATGGCTACCAGGAAAATCTCTGTGATCACC ATCTTCGGCCCTGTCAACAACAGCACCATGAAAATCGACCACTTTCAGCTAGATAATGAGAAGCCCATGCGAGTG GTGGATGATGAAGACTTGGTAGACCAGCGTCTCATCAGCGAGCTGAGGAAAGAGTACGGAATGACCTACAATGAC TTCTTCATGGTGCTAACAGATGTGGATCTGAGAGTCAAGCAATACTATGAGGTACCAATAACAATGAAGTCTGTG TTTGATCTGATCGATACTTTCCAGTCCCGAATCAAAGATATGGAGAAGCAGAAGAAGGAGGGGCATTGTTTGCAAA GAGGACAAAAAGCAGTCCCTGGAGAACTTCCTATCCAGGTTCCGGTGGAGGAGGAGGTTGCTGGTGATCTCTGCT CCTAACGATGAAGACTGGGCCTATTCACAGCAGCTCTCTGCCCTCAGTGGTCAGGCGTGCAATTTTGGTCTGCGC CACATAACCATTCTGAAGCTTTTAGGCGTTGGAGAGGAAGTTGGGGGGAGTGTTAGAACTGTTCCCAATTAATGGG AGCTCTGTTGTTGAGCGAGAAGACGTACCAGCCCATTTGGTGAAAGACATTCGTAACTATTTTCAAGTGAGCCCG GAGTACTTCTCCATGCTTCTAGTCGGAAAAGACGGAAATGTCAAATCCTGGTATCCTTCCCCAATGTGGTCCATG GTGATTGTGTACGATTTAATTGATTCGATGCAACTTCGGAGACAGGAAATGGCGATTCAGCAGTCACTGGGGATG CGCTGCCCAGAAGATGAGTATGCAGGCTATGGTTACCATAGTTACCACCAAGGATACCAGGATGGTTACCAGGAT GACTACCGTCATCATGAGAGTTATCACCATGGATACCCTTACTGA

PCT/US2003/028547

1302/6881 FIGURE 1212

MTWRMGPRFTMLLAMWLVCGSEPHPHATIRGSHGGRKVPLVSPDSSRPARFLRHTGRSRGIERSTLEEPNLQPLQ
RRRSVPVLRLARPTEPPARSDINGAAVRPEQRPAARGSPREMIRDEGSSARSRMLRFPSGSSSPNILASFAGKNR
VWVISAPHASEGYYRLMMSLLKDDVYCELAERHIQQIVLFHQAGEEGGKVRRITSEGQILEQPLDPSLIPKLMSF
LKLEKGKFGMVLLKKTLQVEERYPYPVRLEAMYEVIDQGPIRRIEKIRQKGFVQKCKASGVEGQVVAEGNDGGGG
AGRPSLGSEKKKEDPRRAQVPPTRESRVKVLRKLAATAPALPQPPSTPRATTLPPAPATTVTRSTSRAVTVAARP
MTTTAFPTTQRPWTPSPSHRPPTTTEVITARRPSVSENLYPPSRKDQHRERPQTTRRPSKATSLESFTNAPPTTI
SEPSTRAAGPGRFRDNRMDRREHGHRDPNVVPGPPKPAKEKPPKKKAQDKILSNEYEEKYDLSRPTASQLEDELQ
VGNVPLKKAKESKKHEKLEKPEKEKKKKMKNENADKLLKSEKQMKKSEKKSKQEKEKSKKKKGGKTEQDGYQKPT
NKHFTQSPKKSVADLLGSFEGKRRLLLITAPKAENNMYVQQRDEYLESFCKMATRKISVITIFGPVNNSTMKIDH
FQLDNEKPMRVVDDEDLVDQRLISELRKEYGMTYNDFFMVLTDVDLRVKQYYEVPITMKSVFDLIDTFQSRIKDM
EKQKKEGIVCKEDKKQSLENFLSRFRWRRRLLVISAPNDEDWAYSQQLSALSGQACNFGLRHITILKLLGVGEEV
GGVLELFPINGSSVVEREDVPAHLVKDIRNYFQVSPEYFSMLLVGKDGNVKSWYPSPMWSMVIVYDLIDSMQLRR
QEMAIQQSLGMRCPEDEYAGYGYHSYHQGYQDGYQDDYRHHESYHHGYPY

PCT/US2003/028547

FIGURE 1213

TTCTGGGAAGGGAGAATGGCGGCGCCCGGGCTGCGGCTGGGAGCGGAAGACTCTTTGAAATGCCTGCGGTGCTA GAGCGACTGAGCCGCTATAATAGCACGTCCCAAGCTTTTGCTGAGGTGCTGCGGCTGCCGAAGCAGCAGCTGAGG AAGCTGCTGTACCCGCTGCAGGAAGTAGAGCGGTTCCTCGCCCCCTACGGGAGGCAAGACCTTCACCTGCGTATC TTTGACCCAAGCCCGGAGGACATAGCCAGGGCGGACAACATCTTCACGGCCACTGAACGGAACCGCATCGACTAC GTCAGCTCCGCCGTCCGTATCGACCACGCCCCGGACCTTCCGCGGCCAGAGGTGTGTTTTATAGGCAGAAGCAAT GTTGGAAAATCATCTCTAATCAAGGCTTTATTTTCACTGGCCCCTGAGGTTGAAGTCAGAGTCTCCAAAAAACCA GGACACAAAGAAAATGAATTTTTTCAAAGTTGGAAAACATTTTACAGTGGTGGACATGCCAGGTTATGGCTTT AGAGCACCTGAAGATTTTGTTGACATGGTAGAGACCTATCTAAAAGAACGAAGGAACTTGAAGAGAACATTTTTA TTAGTGGATAGCGTTGTTGGAATTCAAAAAACAGACAATATTGCCATAGAAATGTGTGAAGAATTTGCATTACCT TATGTGATTGTATTAACAAAAATTGACAAATCTTCCAAGGGACATCTTTTAAAACAAGTGCTTCAGATCCAGAAA TTTGTTAACATGAAAACTCAAGGATGTTTTCCTCAGTTGTTTCCTGTAAGTGCTGTGACCTTTTCTGGAATCCAC CTGTTGAGATGCTTTATAGCCAGTGTAACAGGAAGTCTTGACTAATGGTTCCCGGTTTAGCTGAAGATTCAAAAA AAAAAAAAAAAGCTTTATGCTAACTGGAGTTAAATACCTAGAAGAATTTCAACATTGTTTTAAATGTTGTGCATC TGTAACTTCAGGAGGATCACTTGAGCTTTAAAACCTGTGCCTTCTCGAAACAAGAATTTGTGCCTGAGGTGAAAA AAGTTTGTAAGTTATTGAATTATGGTGTTCATTAGAACAGCTACTAGCTGATTCCCCCTATTTTAACAAACTGACA AGAGCACATCCATAAAATGAAAACCTGTTACAACTATGTACAGAAGGGTTTGACGTTTTATTGGGCTTTTGTCTT TTAAAGAATATGTCTACTATGGGTATTTTTTTTTAAATGTTAAAATGGGCTAGGTAAAAGGGGGCTGCTTTTCT GTTAAGCATCGATAGGTAAGTTGATGGATAAAAGTTACTATGTAAGCCTATTTTTTTGAGTCCTTATTTGAATAT TGAAAACATTCTTGATAAAATGTGTTAGTCCATGTTGGAAACAACCGAAAGAACAGAATTCAAGTTCTAGTTCTG ATGTTTATTATATATGTTGGATCTTGGGCAACTTACTTGATTTCTCGGAAATTCATTTGTTACTGTAAACGTGAA AGCTATTAAGATTCAAATGAATGGTTTTACAGCAGGTAACATGTGAGAAGACAGCTACATATTTGTAAAGCCAAA CCAACAAAGAAATATAGCAAAATTCACAGGTAGATTTATTACAAGAAATGTCCTTTCATGGGGGAAGTAACATTT TCACTAGTGAAAAAGCAAAAAACAAAAATAGCTTTAAGTGAGAAAACTAATTT

PCT/US2003/028547

1304/6881 FIGURE 1214

TCGGAGAGGAACAAGCTAGCTATGTTGACTGGTGTTCTTCTGGCTAATGGAACACTTAATGCATCCATTCTTAAT AGCCTTTATAATGAAAATTTGGTTAAAGAAGGAGTTTCAGCAGCTTTTGCTGTGAAGCTCTTTAAATCATGGATA AATGAAAAAGATATCAATGCAGTAGCTGCAAGTCTTCGGAAAGTCAGCATGGATAACAGACTGATGGAACTCTTT ATAGTCTGGTCAAGTGTAATGAGCACTGTGGAATGGAACAAAAAAAGAGGAGCTTGTAGCAGAGCAAGCCATCAAG CACTTGAAGCAATACAGCCCTCTACTTGCTGCCTTTACTACTCAAGGTCAGTCTGAGCTGACTCTGTTACTGAAG ATTCAGGAGTATTGCTATGACAACATTCATTTCATGAAAGCCTTCCAGAAAATAGTGGTGCTTTTTTATAAAGCT GAAGTCCTGAGCGAGGAGCCCATTTTGAAGTGGTATAAAGATGCACATGTTGCAAAGGGGAAGAGTGTTTTCCTT GAGCAAATGAAAAAGTTTGTAGAATGGCTCAAAAATGCTGAAGAAGAATCTGAATCTGAAGCTGAAGAAGGTGAC TGAATTTTGAAACTACACCCTCAGTAAAGCAAACAGGAGTTGTAGATAAAATGTCATGTCTCATGTGTCCTGGTT CTTACATCTTCCTACCTCCCTGTATCAAGCATGATATAAGGGCTTTCATGGCAAATTTTATTTTAACTGTTTCTA TGGTTGCTGGAAATGTTGGGTTTAGTTTCTAAAACCATGTTTTAAGTAGCTACAGGAGCTATAGATTTGAATCTA ATGTTGCATTAGTCTTTCAGTTATCTTCTACCTCCTGTATTTTCTACTGTAATAATGTAATTTAAGGCCTTCCA GTTATAAAAATTCTGTTTGCAAATTAAACTGGAAAAGTATCCAGAGTCTCAAAAGGCAATGATTTGTGAGATAAT ATGGCATGCCCGGAGCCCTGCTCATCAATGAAAAACCCATATGTAATAATCGAATTCATTTAACATGAATCTTGA TATCCTAAAGCTCAATTGTTTGGTCTCTGGTTTTCATCCTTAGAGAAGCCATGGAGAACAGACTTGAAAAGTTTA GGAAATCATAATGTGGCAGAGGTGGTGGGAAGAAGAAGTTGAGCTTTTTCCCCTTGAGAAACTTCTGCATTTAG TTTGTATCTTTCCAGGCAAAACAATGGGTATTCTTTTCATACAACCATTTTCAAATGAACCTTAGAAAAGTCTT AACATTTAAGGTATTTTATGCACAGAATACACTTAGATTGATAGGAAAGAACTCGTAATGGAGTTTGAGTAAAGA AAATGACTGATGTACTAAACCCAGTAAAAATTGTTGAAAATGTTAAAGGTCAGCATGTTCTAATTGGGAATCTAG ATATAGCTTAGATTTCCTATTGGCTTAGAGTATTTGCTATAACAAATGAAGTGCAATGACAATTATATATTCCTA CTCGGTCATACTGGACTGGCTTCGTTCTCTTAACATACTCAGTAATGACTCAAGCCTCTGGCTATTAACATACCC TATGGGAAGACTTTGTGTTAAAAGTGAACATTTTGAAGGTTTTTAACTGGTGAAACTAGCCTGGAATAATGCCAC CAGAGACTGAGTGGAAATCGCCCCTTTTGAAGGTGCCATTCTTATGAGCCAAAAGTTTGTCATTTAAAAGTTCAT TTTGCGGGAATAACATGTAATATAATTTGAAATAAAGGTATAGTAACCTTAAAAAGAACATTATAACTGATTGTT GTGAATGGGGTGAATTTGTTAAAATGAGTAACTTTGATAAAGTTTTTCATGCACAGGCAAAATGTATTCACTAGA TACTTACACTT

PCT/US2003/028547

FIGURE 1215

MLTGVLLANGTLNASILNSLYNENLVKEGVSAAFAVKLFKSWINEKDINAVAASLRKVSMDNRLMELFPANKQSV EHFTKYFTEAGLKELSEYVRNQQTIGARKELQKELQEQMSRGDPFKDIILYVKEEMKKNNIPEPVVIGIVWSSVM STVEWNKKEELVAEQAIKHLKQYSPLLAAFTTQGQSELTLLLKIQEYCYDNIHFMKAFQKIVVLFYKAEVLSEEP ILKWYKDAHVAKGKSVFLEQMKKFVEWLKNAEEESESEAEEGD

PCT/US2003/028547

1306/6881 FIGURE 1216A

GGCACGAGGGATCGGCGGAGCTCCCACCTCCGCTTACAGCTCGCTGCCGCGCCCCCGCGCCCCCAGGAGA TGGACACTGCAAAGAGAAGAAATCCGTAAGTCCATCTGCCAGCCCAGTTGTTTGCTATCAGTCCAACCGTGATGA GCTCCGACGTCGCATCATCCAGTGGCTGGAAGCTGAGATCATTCCAGATGGCTGGTTCTCTAAAAGGCAGCAACTA CAGTGAAATCCTAGACAAGTATTTTAAGAACTTTGATAATGGTGATTCTCGCCTGGACTCCAGTGAATTCCTGAA GTTTGTGGAACAGAATGAAACTGCCATCAATATTACAACGTATCCAGACCAGGAGAACAACAAGTTGCTTAGGGG ACTCTGTGTTGATGCTCTCATTGAACTGTCTGATGAAAATGCTGATTGGAAACTCAGCTTCCAAGAGTTTCTCAA GTGCCTCAACCCATCTTTCAACCCTCCTGAGAAGAAGTGTGCCCTGGAGGATGAAACGTATGCAGATGGAGCTGA GACCGAGGTGGACTGTAACCGCTGTGTCTGTGCCTGTGGAAATTGGGTCTGTACAGCCATGACCTGTGACGGAAA GAATCAGAAGGGGGCCCAGACCCAGACAGAGGAGGAGATGACCAGATATGTCCAGGAGCTCCAAAAGCATCAGGA $\mathtt{AACAGCTGAAAAGACCAAGAGAGTGAGCACCAAAGAGATC}$ \mathtt{TAA} $\mathtt{TGAGGAGGCACAGACCAGTGTCTGGATCCCAG}$ CATCTTCTCCACTTCAGCGCTGAGTTCAGTATACACAAGTGTCTGCTACAGTCGCCAAATCACCAGTATTTGCTT GCCACAGCCTTCATTTCTAGGAGTGCTTTAAGAGAAACTGTAAATGGTGCTCTGGGGGCTGGAGGCTAGTAAGGAA ACTGCATCACGATTGAAAGAGGAACAGACCCAAATCTGAACCTCTTTTGAGTTTACTGCATCTGTCAGCAGGCTG CAGGGAGTGCACACGATGCCAGAGAAACTTAGCAGGGTGTCCCCGGAGGAGAGGTTTGGGAAGCTCCACGGAGA GGAACGCTCTCTGCTTCCAGCCTCTTTCCATTGCCGTCAGCATGACAGACCTCCAGCATCCACGCATCTTTGGT GGAGGGTACACCCAAATGATGCAGATACTTGTATACTTTGAGCCCCTTAGCGACCTAACCAAATTTTAAAAATAC TTATATTATTGTTTTTAATATTTTATTTTCTTGACTAGGTATTAAGCTTTTGTAATTATTTTTCAGTAGTCCCA CCACTTCATAGGTGGAAGGAGTTTGGGGTTCTTCCTGGTGCAGGGGCTGAAATAACCCAGATGCCCCCACCCTGC CACATACTAGATGCAGCCCATAGTTGGCCCCCCTAGCTTCCAGCAGTCCACTATCTGCCAGAGGAGCAAGGGTGC TTCTGAGAAGTTGAGGCAAATCAGTATTCCCAAGGATGGCGACAAGGGCCAAGCAGGGCTTAGGATATCCCA GCCTACCAATATGCTCATTCGACTAACTAGGAGGGTGAGTTGGCCCTGTCTCTTTTTTTCTGGACCTCAGTTT CCTCAGTGAGCTGGTAAGAATGCACTAACCTTTTGATTTGATAAGTTATAAATTCTGTGGTTCTGATCATTGGTC CAGAGGGGAGATAGGTTCCTGTGATTTTTCCTTCTTCTATAGAATAAATGAAATCTTGTTACTAGAACAAGAA ATGTCAGATGGCCAAAAACAAGATGACCAGATTTGATCTCAGCCTGATGACCCTACAGGTCGTGCTATGATATGG AGTCCTCATGGGTAAAGCAGGAAGAGAGTGGGAAAGAGAACCACCCCACTCTGTCTTCATATTTGCATTTCATGT TTCTGTGATTATTAACCCCACTCACTACCCTGTTTCAGATGCATTTGGAATACCAAAGATTAAATCCTTGACATA AGATCTCATTTGCAGAAAGCAGATTAAAGACCATCAGAAGGAAATTATTTAGGTTGTAATGCACAGGCAACTGTG AGAAACTGTTGTGCCAAAAATAGAATTCCTTCTAGTTTTTCTTGTTCTCATTTGAAAGGAGAAAATTCCACTTTG TTTAGCATTTCAAGCTTTTATGTATCCATCCCATCTAAAAACTCTTCAAACTCCACTTGTTCAGTCTGAAATGCA GCTCCCTGTCCAAGTGCCTTGGAGAACTCACAGCAGCACGCCTTAATCAAAGGTTTTACCAGCCCTTGGACACTA TGGGAGGAGGGCAAGAGTACACCAATTTGTTAAAAGCAAGAAACCACAGTGTCTCTTCACTAGTCATTTAGAACA TGGTTATCATCCAAGACTACTCTACCCTGCAACATTGAACTCCCAAGAGCAAATCCACATTCCTCTTGAGTTCTG CAGCTTCTGTGTAAATAGGGCAGCTGTCGTCTATGCCGTAGAATCACATGATCTGAGGACCATTCATGGAAGCTG TCCTTCAGCCCTCTAAAAGCATAGGGCTTAGCCTGCAGGCTTCCTTGGGCTTTCTCTGTGTGTAGTTTTGTAA ACACTATAGCATCTGTTAAGATCCAGTGTCCATGGAAACATTCCCACATGCCGTGACTCTGGACTATATCAGTTT TTGGAAAGCAGGGTTCCTCTGCCTGCTAACAAGCCCACGTGGACCAGTCTGAATGTCTTTCCTTTACACCTATGT TTTTAAGTAGTCAAACTTCAAGAAACAATCTAAACAAGTTTCTGTTGCATATGTGTTTGTGAACTTGTATTTGTA

PCT/US2003/028547

1307/6881 FIGURE 1216B

PCT/US2003/028547

FIGURE 1217

MWKRWLALALALVAVAWVRAEEELRSKSKICANVFCGAGRECAVTEKGEPTCLCIEQCKPHKRPVCGSNGKTYLN HCELHRDACLTGSKIQVDYDGHCKEKKSVSPSASPVVCYQSNRDELRRRIIQWLEAEIIPDGWFSKGSNYSEILD KYFKNFDNGDSRLDSSEFLKFVEQNETAINITTYPDQENNKLLRGLCVDALIELSDENADWKLSFQEFLKCLNPS FNPPEKKCALEDETYADGAETEVDCNRCVCACGNWVCTAMTCDGKNQKGAQTQTEEEMTRYVQELQKHQETAEKT KRVSTKEI

PCT/US2003/028547

FIGURE 1218

PCT/US2003/028547

1310/6881 FIGURE 1219

 ${\tt MSFPKYKPSSLRTLPETLDPAEYNISPETRRAQAERLAIRAQLKREYLLQYNDPNRRGLIENPALLRWAYARTIN}\\ {\tt VYPNFRPTPKNSLMGALCGFGPLIFIYYIIKTERDRKEKLIQEGKLDRTFHLSY}$

PCT/US2003/028547

FIGURE 1220

GATGACACACAATAATTTTTGGTTGAAGAAGATAGAAATCAGTGTTTCAGAAGCAGAAAAACGAACTGGAAGAAA TGCCATGAACATGCAAGAAACATATACTGCTTACCTCATTGAAACAAGGTCAGTTGAACATACCGATGGTCAGAG TGTCCTAACAGACTCACTATGGCGGCGATATAGTGAATTTGAGTTGTTGAGAAGCTACCTTTTAGTTTACTATCC TCCAGATTTTGTGGAGAGGCGACGGATTGGTTTAGAAAACTTTCTCTTGAGGATTGCTTCACATCCCATCCTTTG GCTGAAGGCAGACTCCAGGTTAAAAGCGCTTAATGCAACATTCAGAGTGAAAAACCCAGACAAGAGATTTACTGA CCTTAAGCACTATAGTGATGAACTGCAGTCTGTCATCTCACATCTTCTTCGAGTCAGAGCTAGAGTAGCAGATCG ACTCTATGGTGTATATAAAGTACATGGGAATTATGGTCGAGTTTTCAGTGAATGGAGTGCCATAGAAAAAGAAAT GGGTGATGGACTGCAGAGTGCTGGTCATCATATGGATGTGTATGCATCTTCTATTGATGATATTTTGGAAGATGA AGAACATTATGCAGATCAGTTAAAAGAGTATCTTTTTTATGCAGAAGCATTGCGGGCTGTGTGCAGGAAACATGA ACTTATGCAGTATGACTTGGAGATGGCTGCTCAGGACTTAGCATCCAAGAAGCAGCAGTGTGAGGAACTGGTAAC TGGGACTGTGAGAACATTCTCTTTGAAGGGAATGACTACCAAGCTCTTTGGTCAAGAAACTCCAGAGCAGAGAA AGCCAGAATAAAGGTGCTAGAAGAACAAATAAATGAAGGAGAACAACAGCTAAAGTCTAAAAATCTGGAAGGCAG AGAATTTGTGAAAAACGCATGGGCTGATATTGAACGCTTCAAAGAACAAAAGAACCGAGACTTAAAGGAGGCCCT CATAAGCTATGCAGTCATGCAGATCAGTATGTGCAAAAAGAGTCTCACCCTGTCACCCAGGCTGGAGTGCAATGG CATGATCTCAGCTCACTACAACCTCCGCCTCCCGTGTTCAAGCAATTCTACCTCATCCAGCCGAGTAGATGGGAT TACAGGGAATTCAAGTTTGGACCAATGCTAAGGAATGCTTTAGCAAGATGTAATCCTGTGAATTGAATTTCTCTT CAATCAAAGTGCCCCAAAACAGAAGCACAAGTAAATAAAAGAAATTTAAGTCACTACCTAGTATACATAAACATA TACAATAAGTTAAATAAATTCAGCTTTCTTTAACTTAATTGTGGTCGTGTTAATGTAGCACAAAAAATATATTTT AATGAAGATTAAATATTATAATTTGAGGTTTTGGGGACTGGTGCTGATTCCAAAAAGTTAATTTAATAATATATA CAAGACCAGCTGTTTCAGATCTATTAATGTAGGGAATTTTTCCCTAAGATTGAATTCCTATATTTACTTGGTAAG ATCCACTAATCTGTTATAGGGAGTTGTTTTCTCTTGCCTTATAGTTGAGCTATTTGGTTTGACAAAGCTCAGCAG ATGCCTTCAATTTGTGTTTTACCAGAATTTTGATACTGGTCAGAAATTTTATACTGCCAACAAAGAAGACTCAAC TTCTCAGATCTATAATGGGATACATTGTCATCCTCTAGCAACTCCTATATAGAAAGTTTTAACTGAATATGTTAC ATATAAGAATTAAATTCTTCTCAAATAATTCTTAACCTCAGTAATGAGCCTAAATTTACTCTGCTTGGCTCTCTA CACATGGCATTTCAGGGTATAAGATGTAGCATTTCAATGTGTAAGATATATGTACTAAACATATGTGTTGCTATC TTCATCATTAACATCCTTCTTTTCTATTGCTTGGCTGTAATTTTTGTAAAGATAAATTATATTGTTTTTTTGTAT GTGTGTTTGTAGTATATGTTCAGAAGGCAAGCATCTTCATTTTGCTAGCTTTGCAGAATCTTAAAATGTGTACTC GTTATTTCTAATGATGTAAAAAAAATCCCTAGTCCTGTTTAGCATTTGACTTTTTATATGTTTTAAATGTTGC

PCT/US2003/028547

1312/6881 FIGURE 1221A

GCAATTTTAGAATGTGCTGGACAAAATGTAGAAAGGGAATGTTCTCAGCAAGCTCAGCAGCGCAAAAATGATTAT GTTTCCTCTGTTTTGCAGGAGTGTGAAAAAAAATTACTCATCCATTTGCCTCCCAGCCATTGGGACAGGAAAT GCCAAACAACACCCAGATAAGGTTGCTGAAGCCATAATTGATGCCATTGAAGACTTTGTCCAGAAAGGATCAGCC CAGTCTGTGAAAAAAGTTAAAGTTGTTATCTTTCTGCCTCAAGTACTGGATGTGTTTTATGCCAACATGAAGAAA AGAGAAGGGACTCAGCTTTCTTCCCAACAGTCTGTGATGTCTAAACTTGCATCATTTTTGGGCTTTTCAAAGCAA TCTCCCCAAAAAAAGAATCATTTGGTTTTGGAAAAGAAAACAGAATCAGCAACTTTTCGGGTGTGGTGAAAAA GTCACGTGTGTGGAATATGCTATCTCCTGGCTACAAGACCTGATTGAAAAAGAACAGTGTCCTTACACCAGTGAA GATGAGTGCATCAAAGACTTTGATGAAAAGGAGTATCAGGAGTTGAATGAGCTGCAGAAGAAGTTAAATATTAAC ATTTCCCTGGACCATAAGAGACCTTTGATTAAGGTTTTGGGAATTAGCAGAGATGTGATGCAGGCTAGAGATGAA ATGAGGCGATGATCAAGAGAGGTTCGATTGGGCAAAGAACAGGAATCCCGGGCAGATTGTATCAGTGAGTTTATA GAATGGCAGTATAATCGACAATAACACTTCTCATGTGTTTTAACAAAATGACCAATCTGAAATTAGAGGATGCAA GGAGAGAAAAGAAAAAACAGTTGATGTCAAAATTAATCATCGGCACTACACAGTGAACTTGAACACATACACTG CCACAGACACAAAGGGCCACAGTTTATCTGTTCAGCGCCTCACGAAATCCAAAGTTGACATCCCTGCACACTGGA GTGATATGAAGCAGCAGAATTTCTGTGTGGTGGAGCTGCTGCCTAGTGATCCTGAGTACAACACGGTGGCAAGCA AGTTTAATCAGACCTGCTCACACTTCAGAATAGAGAAGATTGAGAGGATCCAGAATCCAGATCTCTGGAATAGCT ATGCCGGCTCCGTGCCACACGTCAATCGAAATGGCTTTAACCGCAGCTATGCCGGAAAGAATGCTGTGGCATATG GAAAGGGAACCTATTTTGCTGTCAATGCCAATTATTCTGCCAATGATACGTACTCCAGACCAGATGCAAATGGGA CAAAGAACCCTCAAAATCCTACTGACCTGTATGACACTGTCACAGATAATGTGCACCATCCAAGTTTATTTGTGG CATTTTATGACTACCAAGCATACCCAGAGTACCTTATTACGTTTAGAAAATAACACTTTGGTATCCTTCCCACAA TTATTATCTTGAGAGCAAATAACTTGGAAAATTTAAATGAGATAATGCAGTTGCAACTGTGTCCCACAAGTATG ACAGCTAAGCACAGCTGCCACTGCAGGAGACAGGCCCCATGTCAGGATGCCATAGTGCTGTGGGGAGCACAGTAT TACCCAGTGGGTAGGGCTTCTGTCTTCCCTGGGAGCAGGGATGGTATCTTAGTCAATTTTTTTCCCTTGAGATGA GACTCCCATCCAAAGTAGGAACTATCTCTTTAACATTCTTGACTCACTATCACTTTACCTCAAATTGAACAGATT CCATGACGGAACTTCATTCTTCACAAACTAGCCAGTGACATGTGGGACAGCTCTGGCCAGGGCTCTGGGACTGCA TTTTTTTGAGATGGAGTTTCACTCTTGTTGCCCAGGCTGGAGTGCAATGGCGCGATCTCAGCTCACTGCAGCCAC TGCCTCCCAGGTTCAAGTGATTCTCCTGCCTCAGCCTCCGAGTAGCTGGGATTACAGGCATGCGCTAACACACC CAGCTAATTTTGTATTTTTAGTAGAGACGAGGTTTCTCCATGTTCGACAGGCTGGTCTCGAACTCCCACCTCAGC CTCCCAAACTGCTGGGATTACAGGTGTGAGCCACCGTGACCAGCCAATGTGCCTTCTTATAGTGTCTACTCATTG GTCTTTGTTCTGCCCAGTGATAACAATGGGATAACGCCTGCTACACATCTTCATTGTGAAACCCTTCCCCTGTGC TGAGATTAAATGAACTCTAAGATTATTAAATAGTATATTTTCCTTGACAGCCTAGCGTTTGATGATTTTAAAGCC TTTTAAAAATTTCCCCAGGTAAGTTTAAGATTCAAACACCATCTATTGAGCACCTACATTGTGTGCCAGGTAGTA AAATAGGTGCTTTCATACACATTGTCTCAATTCCTGTGAGGTCAGAATTATCTCTGCATTTGAAACTTGAGGAAA CATGCTCAGAGTGCAAGAAGCTTCCTTGCCTGAGATCACCTAGAAAGGAACCCTCAGAGCCGGCAACTGAATCTT GGTCCCTGTGATGTCAAGCCCATTGCTCTCCCACTGCAGAACATGGCCTCTAGATTAATGCCACCGATTCAGGAA TTCATTGGAAGCTCTGTAGGCCAAGGCCAGAGCTGATACTGACACGGAGCCAATGCAGATAGCACATCAGATGCT AGGGGTCGCTGGGAGGATTAAGGGACTTAATCTGCTAGGAACACCTGTACTTGAAGTGGAGGAGGCTAGGGGGCC

PCT/US2003/028547

1313/6881 FIGURE 1221B

PCT/US2003/028547

FIGURE 1222

MKKREGTQLSSQQSVMSKLASFLGFSKQSPQKKNHLVLEKKTESATFRVCGENVTCVEYAISWLQDLIEKEQCPY
TSEDECIKDFDEKEYQELNELQKKLNINISLDHKRPLIKVLGISRDVMQARDEIEAMIKRVRLAKEQESRADCIS
EFIEWQYNDNNTSHCFNKMTNLKLEDARREKKKTVDVKINHRHYTVNLNTYTATDTKGHSLSVQRLTKSKVDIPA
HWSDMKQQNFCVVELLPSDPEYNTVASKFNQTCSHFRIEKIERIQNPDLWNSYQAKKKTMDAKNGQTMNEKQLFH
GTDAGSVPHVNRNGFNRSYAGKNAVAYGKGTYFAVNANYSANDTYSRPDANGRKHVYYVRVLTGIYTHGNHSLIV
PPSKNPQNPTDLYDTVTDNVHHPSLFVAFYDYQAYPEYLITFRK

PCT/US2003/028547

FIGURE 1223

GAATTCGGGGGGCGCCGGAGTGGAGAAAGGAGCCAGCGGTGGGCAGCGCTGCTGGGA<u>ATG</u>GCGCGGGCCGGGCCGG CGTGGCTGCTGCCAATCTGGGTGGTCCTGCCATCATGGCTGTCCTCTGCAAAGGTCTCCTCGCTCATTGAGA GAATCTCTGACCCCAAGGACTTGAAAAAACTGCTCAGAACCCGGAATAATGTACTGGTGCTTTACTCCAAATCTG AGGTGGCAGCTGAAAATCATCTCAGGTTACTGTCCACAGTGGCCCAGGCGGTGAAAGGACAAGGGACCATCTGCT GGGTGGACTGTGGTGATGCAGAGAGTAGAAAATTGTGCAAGAAGATGAAAGTTGACCTGAGCCCGAAGGACAAAA AGGTTGAATTATTCCATTACCAGGATGGTGCATTTCATACTGAATATAACCGAGCTGTGACATTTAAGTCCATAG TGGCCTTTTTGAAGGATCCAAAAGGGCCCCCACTGTGGGAGGAAGATCCTGGAGCCAAAGATGTTGTCCACCTTG ACAGTGAAAAGGACTTCAGACGGCTCCTGAAGAAGGAAGAGAGCCGCTCCTGATCATGTTTTATGCCCCCTGGT GCAGCATGTGCAAGAGGATGATGCCGCATTTCCAGAAGGCTGCGACTCAGCTGCGAGGCCACGCCGTGCTGGCCG GGATGAATGTCTACTCCTCTGAATTTGAAAACATCAAGGAGGAGTACAGCGTGCGCGGCTTCCCCACCATCTGCT ATTTTGAGAAAGGACGGTTCTTGTTCCAGTATGACAACTATGGGTCCACAGCTGAGGACATTGTGGAGTGGCTGA AGAATCCGCAGCCGCCACAGCCCCAGGTCCCTGAGACTCCCTGGGCAGATGAGGGCGGCTCCGTTTATCACCTGA CCGATGAAGACTTTGACCAGTTTGTGAAGGAACACTCCTCTGTCCTCGTCATGTTCCACGCCCCATGGTGTGGCC ACTGTAAGAAAATGAAGCCGGAGTTTGAGAAGGCAGCAGAAGCCCTCCATGGAGAAGCGGATAGCTCTGGTGTCC TTGCAGCTGTCGATGCCACTGTCAACAAGGCCCTGGCAGAAAGATTCCACATCTCAGAGTTTCCTACGTTGAAGT ATTTTAAGAATGGAGAGAAATACGCAGTGCCTGTGCTCAGGACAAAGAAGAAGTTTCTCGAGTGGATGCAAAACCC CTGAGGCCCCCCGCCCCAGAGCCCACGTGGGAAGAGCAGCAGACAAGCGTGTTGCACCTGGTGGGGGACAACT TCCGGGAGACCCTGAAGAAGAAGAACACCCTTGGTCATGTTCTACGCCCCTTGGTGCCCACACTGTAAGAAGA TCATTCCGCACTTTACTGCTACTGCTGATGCCTTCAAAGATGACCGAAAGATTGCCTGTGCCGCTGTTGACTGTG TCAAAGACAAGAACCAAGACCTGTGCCAGCAGGAGGCGGTCAAGGGCTACCCCACTTTCCACTACTACCACTATG GGAAGTTCGCAGAAAAGTATGACAGCGACCGCACAGAATTGGGATTTACCAATTATATTCGAGCCCTCCGGGAGG GAGACCATGAAAGACTAGGGAAAAAGAAGGAAGAGTTA**TAA**TTCCTGCCTCAGAAAAAGCTTTTCCATTACACTG TGAATGATACCTGTTTTGTTGTTTCTGAATTTCCCCCGAATTC

PCT/US2003/028547

FIGURE 1224

MARAGPAWLLLAIWVVLPSWLSSAKVSSLIERISDPKDLKKLLRTRNNVLVLYSKSEVAAENHLRLLSTVAQAVK GQGTICWVDCGDAESRKLCKKMKVDLSPKDKKVELFHYQDGAFHTEYNRAVTFKSIVAFLKDPKGPPLWEEDPGA KDVVHLDSEKDFRRLLKKEEKPLLIMFYAPWCSMCKRMMPHFQKAATQLRGHAVLAGMNVYSSEFENIKEEYSVR GFPTICYFEKGRFLFQYDNYGSTAEDIVEWLKNPQPPQPQVPETPWADEGGSVYHLTDEDFDQFVKEHSSVLVMF HAPWCGHCKKMKPEFEKAAEALHGEADSSGVLAAVDATVNKALAERFHISEFPTLKYFKNGEKYAVPVLRTKKKF LEWMQNPEAPPPPEPTWEEQQTSVLHLVGDNFRETLKKKKHTLVMFYAPWCPHCKKVIPHFTATADAFKDDRKIA CAAVDCVKDKNQDLCQQEAVKGYPTFHYYHYGKFAEKYDSDRTELGFTNYIRALREGDHERLGKKKEEL

PCT/US2003/028547

1317/6881 FIGURE 1225

PCT/US2003/028547

FIGURE 1226

MKLGGTHSPFRACSEPEDAAMERSAFMELDAGSRLVMHLREWPALLVSSTGWTEFEQLTLDGHNLPSLVCVITGS VDLGVCLHMSSSGLDLPMKVVDMFGCCLPVCAVNFKCLHELVKHEENGLVFEDSEELAALQMLFSNFPDPAGKLN QFWKNLRESQQLRWDESWVQTVLPLVMDIQLLGQRLKPRDPCCPSRSFFSESQGKPF

PCT/US2003/028547

1319/6881 FIGURE 1227

GCAGACACGTG<u>ATC</u>CGGGGGGGGGGGGGGGGGGGGGGGCAGGAGCAAGCGTCTGCCGCGGTGGCCGGTGCCGGTA ATTCCCATCGGCCGAGGCTGTCACTTTACGCTCATAACCGTTTTTCTTTACTGCACTCGTGTCGGGAGGAAAGGG ${\tt GC}\underline{{\tt TGA}}{\tt GGGACGGCCTGTCGTACGGTGCGGATGGTGGTGGCCTGCGAGGCTCATTTCTAGCAAGGAACAAGGCTTT}$ CCCGCTTTGATTTTATAAATATTATGTTTACAAAGCTGTAATATATAGAAATTGATAAGACGTGTCCCTGTCCCT GGAAACGCAGGCACCGCGTGTTTGGAAAGACATTCATCTGGGCTGTTTGACAGACTCCCCAGTTGGTGCCATGCT $\tt CTGTGCTTAGGGAACTGTGAGACCCCTGGAGGGGTGGGTACCGGGACCGCACTCAGCCTGGGGTTTGGAGGCGGC$ AAGAGCATTGCAGGCATCGGGACTGTCACATTTGACAAGATCAAAGCTGCAGGAAAATGGACAGTGAGGTTCAGA GAGATGGAAGGATCTTGGATTTGATGATGATGCTTGGCGAGAAGACAAGCTGCCTTATGAGGATGTCGCAATAC CACTGAATGAGCTTCCTGAACCTGAACAAGACAATGGTGGCACCACAGAATCTGTCAAAGAACAAGAAATGAAGT GGACAGACTTAGCCTTACAGTACCTCCATGAGAATGTTCCCCCCATTGGAAACTGACGCTTGGCTCCTTTCTTGT TCAGCACTCAAAAATGTACACCCATTTAGTTTGTGGTAGCAAAGTGCAAATGCGAAATTGAATGAGAAACTGAGAT TTCTCAGTAATGGTGAATATTTCGCTCTTTAAACCTAAAACTCTTCATTGAGTAGCTTATATTTGAACATGATTG GTTAAACATTTGCCTCTACCTCTGATTTTGCTTTGCTGTCAAAGTTTAACACCTTCCAACTACTTATGTGTGTCC TGTAACACAGGTGATTGAACGTATGAGAGGGAAAGGCAAAGAAAAAGGAAGCCAGACACTAGGAGAATTATTAAC TTCTCATACTTCCCCACATTGAGAAGCATTCGGAGTGTATTTAGCCTGTAGATGTTGTGATATGCAAATATCCCA TTCCCTGGTTACTGGCATTCCTAAGATTCTTCATGGTATTTTCAAACTTTGGATAAATTTACAGATTAGAAAGAT ATCTGACAGTTAATCTCTGTTCTCCTTACAAATTCCTTTTGTGCTGGAAAGGATCTTTGGCTAGGTGGATGA CTAGTTTTATTCAAAGCCTTTTCTCAAAGCCCTTTCAGTTACAACCACCCCACTATGGAATCAGTATTTAGTTAT AGTGTCTTCATGTTCTCCCCCAGATTGTAAACTCTGTAAGAAGCTGCTTGTATCTGTATCCCTTGTTGAAACT CTGAAAACACTGAATAACTAAAATCTCTTCTCATCCTTTT

PCT/US2003/028547

1320/6881 FIGURE 1228

 ${\tt MRGRGGGRGRSKRLPRWPGAGKGFQRPRPRFWRRGNAFVAQCRTSPYSHRPRLSLYAHNRFSLLHSCREERDLRGTPRPRLRFHVWYILPEAGSRS}$

PCT/US2003/028547

FIGURE 1229

 ${\tt AGTGGCGGAGAGGATCGTGGTACTGCT} {\tt \underline{ATG}} {\tt GCGGAATCATCGGAATCCTTCACCATGGCATCCAGCCCGGCCCAG}$ CGTCGGCGAGGCAATGATCCTCTCACCTCCAGCCCTGGCCGAAGCTCCCGGCGTACTGATGCCCTCACCTCCAGC CCTGGCCGTGACCTTCCACCATTTGAGGATGAGTCCGAGGGGCTCCTAGGCACAGAGGGGCCCCTGGAGGAAGAA GAGGATGGAGAGGAGCTCATTGGAGATGGCATGGAAAGGGACTACCGCGCCCATCCCAGAGCTGGACGCCTATGAG ATGCGGCAGCGTGACCGGGAGGCTGGCCGGGGCCTGGGCCGATGCGCCGTGGGCTCCTGTATGACAGCGATGAG GAGGACGAGGAGCGCCCTGCCCGCAAGCGCCCAGGTGGAGCGGCCACGGAGGACGGCGAGGAGGACGAGGAG ATGATTGAGAGCATCGAGAACCTGGAGGATCTCAAAGGCCACTCTGTGCGCGAGTGGGTGAGCATGGCGGGCCCC CGGCTGGAGATCCACCACCGCTTCAAGAACTTCCTGCGCACTCACGTCGACAGCCACGGCCACAACGTCTTCAAG GAGCGCATCAGCGACATGTGCAAAGAGAACCGTGAGAGCCTGGTGGTGAACTATGAGGACTTGGCAGCCAGGGAG CACGTGCTGGCCTACTTCCTGCCTGAGGCACCGGCGGAGCTGCTGCAGATCTTTGATGAGGCTGCCCTGGAGGTG GAGGAGCTGCGCTGAGGCAGCTGCATCTGAACCAGCTGATCCGCACCAGTGGGGTGGTGACCAGCTGCACT GGCGTCCTGCCCCAGCTCAGCATGGTCAAGTACAACTGCAACAAGTGCAATTTCGTCCTGGGTCCTTTCTGCCAG GAGACCATCTATCAGAACTACCAGCGTATCCGAATCCAGGAGAGTCCAGGCAAAGTGGCGGCTGGCCGGCTGCCC CGCTCCAAGGACGCCATTCTCCTCGCAGATCTGGTGGACAGCTGCAAGCCAGGAGACGAGATAGAGCTGACTGGC ATCTATCACAACAACTATGATGGCTCCCTCAACACTGCCAATGGCTTCCCTGTCTTTGCCACTGTCATCCTAGCC AACCACGTGGCCAAGAAGGACAACAAGGTTGCTGTAGGGGAACTGACCGATGAAGATGTGAAGATGATCACTAGC CTCTCCAAGGATCAGCAGATCGGAGAGAAGATCTTTGCCAGCATTGCTCCTTCCATCTATGGTCATGAAGACATC AAGAGAGGCCTGGCTCTGGCCCTGTTCGGAGGGGAGCCCAAAAACCCAGGTGGCAAGCACAAGGTACGTGGTGAT ATCAACGTGCTCTTGTGCGGAGACCCTGGCACAGCGAAGTCGCAGTTTCTCAAGTATATTGAGAAAGTGTCCAGC ATGAATGACCAGGACAGCATCCATGAGGCCATGGAGCAACAGAGCATCTCCATCTCGAAGGCTGGCATC GTCACCTCCCTGCAGGCTCGCTGCACGGTCATTGCTGCCGCCAACCCCATAGGAGGGCGCTACGACCCCTCGCTG GAGGAGGAGGGCTGCCAATGGCAGCGCTGCTGAGCCCCATGCCCAACACGTATGGCGTGGAGCCCCTGCCC CAGGAGGTCCTGAAGAAGTACATCATCTACGCCAAGGAGGGGTCCACCCGAAGCTCAACCAGATGGACCAGGAC AAGGTGGCCAAGATGTACAGTGACCTGAGGAAAGAATCTATGGCGACAGGCAGCATCCCCATTACGGTGCGGCAC AACATGGCCATCCGCGTGATGCTGGAGAGCTTCATAGACACACAGAAGTTCAGCGTCATGCGCAGCATGCGCAAG ACTTTTGCCCGCTACCTTTCATTCCGGCGTGACAACAATGAGCTGTTGCTCTTCATACTGAAGCAGTTAGTGGCA GAGCAGGTGACATATCAGCGCAACCGCTTTGGGGCCCAGCAGGACACTATTGAGGTCCCTGAGAAGGACTTGGTG GATAAGGCTCGTCAGATCAACATCCACAACCTCTCTGCATTTTATGACAGTGAGCTCTTCAGGATGAACAAGTTC $\mathtt{AGCCACGACCTGAAAAGGAAAATGATCCTGCAGCAGTTC}$ $\mathtt{TGAGGCCCTATGCCATCCATAAGGATTCCTTGGGAT}$ TCTGGTTTGGGGTGGTCAGTGCCCTCTGTGCTTTATGGACACAAAACCAGAGCACTTGATGAACTCGGGGTACTA TCACCTTTGGGTGGGATGCCTTGCCAGTGTGTCTTACTTGGTTGCTGAACATCTTGCCACCTCCGAGTGCTTTGT CTCCACTCAGTACCTTGGATCAGAGCTGCTGAGTTCAGGATGCCTGCGTGTGGTTTAGGTGTTAGCCTTCTTACA TGGATGTCAGGAGAGCTGCTGCCCTCTTGGCGTGAGTTGCGTATTCAGGCTGCTTTTGCTGCCTTTGGCCAGAGA GCTGGTTGAAGATGTTTGTAATCGTTTTCAGTCTCCTGCAGGTTTCTGTGCCCCTGTGGTGGAAGAGGGCACGAC AGTGCCAGCGCAGCGTTCTGGGCTCCTCAGTCGCAGGGGTGGGATGTGAGTCATGCGGATTATCCACTCGCCACA GTTATCAGCTGCCATTGCTCCCTGTTTTCCCCACTCTCTTATTTGTGCATTCGGTTTGGTTTCTGTAGTTTT AATTTTTAATAAAGTTGAATAAAATAT

PCT/US2003/028547

1322/6881 FIGURE 1230

MAESSESFTMASSPAQRRRGNDPLTSSPGRSSRRTDALTSSPGRDLPPFEDESEGLLGTEGPLEEEEDGEELIGD GMERDYRAIPELDAYEAEGLALDDEDVEELTASQREAAERAMRQRDREAGRGLGRMRRGLLYDSDEEDEERPARK RRQVERATEDGEEDEEMIESIENLEDLKGHSVREWVSMAGPRLEIHHRFKNFLRTHVDSHGHNVFKERISDMCKE NRESLVVNYEDLAAREHVLAYFLPEAPAELLQIFDEAALEVVLAMYPKYDRITNHIHVRISHLPLVEELRSLRQL HLNQLIRTSGVVTSCTGVLPQLSMVKYNCNKCNFVLGPFCQSQNQEVKPGSCPECQSAGPFEVNMEETIYQNYQR IRIQESPGKVAAGRLPRSKDAILLADLVDSCKPGDEIELTGIYHNNYDGSLNTANGFPVFATVILANHVAKKDNK VAVGELTDEDVKMITSLSKDQQIGEKIFASIAPSIYGHEDIKRGLALALFGGEPKNPGGKHKVRGDINVLLCGDP GTAKSQFLKYIEKVSSRAIFTTGQGASAVGLTAYVQRHPVSREWTLEAGALVLADRGVCLIDEFDKMNDQDRTSI HEAMEQQSISISKAGIVTSLQARCTVIAAANPIGGRYDPSLTFSENVDLTEPIISRFDILCVVRDTVDPVQDEML ARFVVGSHVRHHPSNKEEEGLANGSAAEPAMPNTYGVEPLPQEVLKKYIIYAKERVHPKLNQMDQDKVAKMYSDL RKESMATGSIPITVRHIESMIRMAEAHARIHLRDYVIEDDVNMAIRVMLESFIDTQKFSVMRSMRKTFARYLSFR RDNNELLLFILKQLVAEQVTYQRNRFGAQQDTIEVPEKDLVDKARQINIHNLSAFYDSELFRMNKFSHDLKRKMI LQQF

PCT/US2003/028547

1323/6881 FIGURE 1231

GCGTTCCTGGGTGCCTGTGTGGCTGGGTCTGATGAGCCTGGCCCAGAGGGCCTCACCTCCACCTCCCTGCTAGAC GGAGCCCCTGGCTCAGGCTTCCCCAGCGAAGAGAATGAAGAGTCTCGGATTCTGCAGCCACCACAGTACTTCTGG GAAGAGGAGGAAGAGCTGAATGACTCAAGTCTGGACCTGGGACCCACTGCAGATTATGTTTTTCCTGACTTAACT GAGAAGGCAGGTTCCATTGAAGACACCAGCCAGGCTCAAGAGCTGCCAAACCTCCCCTCTCCCTTGCCCAAGATG AAGGAAGAGGTAGAAACAAGAGGAGGAGGAAGAGGAGGAGCTGCTCCCTGTGAATGGATCCCAAGAAGAAGCC TCCGGGGACCAGGCCTCATCAGGTGTGGAGGTGGAGAGCAGCATGGGGCCCAGCTTGCTGCCTTCAGTCACC CCAACTACAGTGACTCCGGGGGACCAGGACTCCACCAGCCAAGAGGCCAGAGGCCACAGTGCTGCCAGCTGCAGGG CTTGGGGTAGAGTTCGAGGCTCCTCAGGAAGCAAGCGAGGAAGCCACTGCAGGAGCAGCTGGTTTGTCTGGCCAG CACGAGGAGGTGCCGGCCTTGCCTTCATTCCCTCAAACCACAGCTCCCAGTGGGGCCGAGCACCCAGATGAAGAT CCCCTTGGCTCTAGAACCTCAGCCTCTTCCCCACTGGCCCCTGGAGACATGGAACTGACACCTTCCTCTGCTACC TTGGGACAAGAAGATCTCAACCAGCAGCTCCTAGAAGGGCAGCAGCTGAAGCTCAATCCAGGATACCCTGGGAT ATAGACTGTGAGGTGTTCCGGCAGCACCGGGGGCCACAGCTCCTGGCCCTGGTGGAAGAGGTGCTGCCCCGCCAT GGCAGTGGCCACCATGGGGCCTGGCACATCTCTCTGAGCAAGCCCAGCGAGAAGGAGCAGCACCTTCTCATGACA CTGGTGGCGAGCAGGGGGGGGGCCCACTCAAGATGTCCTTTCCATGCTGGGTGACATCCGCAGGAGCCTGGAG ${\tt ACGCTCTTCGTGGTGCTCGTTGGGGCCATCTGCATCATCATCATTGCGCTTGGCCTGCTCTACAACTGC}$ TGGCAGCGCCGGCTGCCCAAGCTCAAGCACGTGTCGCACGGCGAGGAGCTGCGCTTCGTGGAGAACGGCTGCCAC GACAACCCCACGCTGGACGTGGCCAGCCAGCCAGTCGGAGATGCAGGAGAAGCACCCCAGCCTGAACGGCGGC GGGGCCCTCAACGGCCCGGGGAGCTGGGGGGGCGCTCATGGGGGGCCAAGCGGGACCCCGAGGACTCGGACGTGTTC GAGGAGGACACGCACCTGTGAGCGCAGCCGAGGCCGAGGCCGAGTGGGCCGACGACCAAGCGAGGTGGACCCC GAAACGGACGGCCCGGAGCCCGCACCAGCCCCGCGCCTACCCGGGCCCCCCGCGGCCTGGCCCTCGGCGCGGG GGGACTCAATTAAACCCGCCCGGAGACCACGCCGGGCCCAGCG

PCT/US2003/028547

FIGURE 1232

 $\tt CTATTTGGTGGATAGGTGGGAGGGAGCAAGGGGAGTTTGAGGGAATCAGAGCTTGATGCTACTGTACAGAACTG$ GACAGGTTGGGCCGGCAGTGGTGGGGCCAGAGGGCTCTGTGCTCTAGGAGCTAAGCCAGCAGCCCCCGAGAGGGG ${\tt TATGGGGCTATGATCCCTAGGCCTGGGCCTGGCCT} \underline{{\tt ATG}} {\tt GCCCAGAGCTACCCTGGGAGTGTCAGTGCTAG}$ CAGCACAGCTACCTCTGGTGGCAGGAGAGAGAGGCCCAGCACAGCAGGCCAGGCCAGGCCTTCCTGTCCAGGTCTG CATGGAGCACTCGGTGACCCAGAGCAGGGACTGGAGGCACCCCCAGCCCTGCCCCAGGCCACAGCAGGACAGGCC GGGACAGGCCTCACCCAAGGCCAAGGCTGGCATCAGCCAATCATTCAGAGCTGAGGCCCTGGGCCTAGCCTGCCC TTCTCAGGTGCCAATACCACCCCAGCCCTGCCCTTGGCCTCACTTTTTCCCAGCAATAAGTGGGGTTCACCACCC GCCTCGGGAATACTTTCCCCTTCTAAATGGGACTTGCTGTTACCTCAGGAGGCTCCTTAGTGCAAATATGACCCT GGTCAGGGCTTTGCCACCGTTGAAGCCCTGCAGAAGGTGCAATGTAGGGGTTCTGGGGCCACAGAGGAGGGCCA $\tt CTTCCCACCAGGACCCCCAACA{\color{red}{\textbf{TGA}}} A GTCTAGGCCTCAGGGGCTCCCGCCCTTCTTCCTCCAGCAGCGGGAACTG$ CCACTGCTCTCCCAGGCCCTGTTCTGGAGGCTAACCTTGGTTCCTGGAGAGTGTGCCCCTCCACCCTCCAG CAGCCCTGATCACCACGAGGAGCCAGGAACGGGTCACCCTGCTGAAGATCACTCTGTGCCCTGGGGGAGGAGCC AAGCCCTCACCCCACAAGGGGCAGGTGGGGGGCTTGGTTGCTGACCCGGCCCAAGTCCCCACAGAGCACCTTCTGT AGCTCCAGCTTGTCTCCCTGG

PCT/US2003/028547

FIGURE 1233

MAQSYPGSVSASSTATSGGRRREAQHSSRPGLPVQVCMEHSVTQSRDWRHPQPCPRPQQDRPGQASPKAKAGISQ SFRAEALGLACPSQVPIPPQPCPWPHFFPAISGVHHPPREYFPLLNGTCCYLRRLLSANMTLVRALPPLKPCRRC NVGVLGPQRRGHFPPGPPT

PCT/US2003/028547

1326/6881 FIGURE 1234

CTGCAGACGAGGCAGGCGGAAGAGGCGGGACTTCGCGGGTGACGTCATCGGGGGCGCCGGAGGCCCGGGGGCGCCTG GGAATTTGAAGCAAACAGGCAGCGCGCGACAATGGCGGTCGCTCGTGCAGCTTTGGGGGCCATTGGTGACGGGTCT GTACGACGTGCAGGCTTTCAAGTTTGGGGACTTCGTGCTGAAGAGCGGGCTTTCCTCCCCCATCTACATCGATCT GCGGGGCATCGTGTCTCGACCGCGTCTTCTGAGTCAGGTTGCAGATATTTTATTCCAAACTGCCCAAAATGCAGG CATCAGTTTTGACACCGTGTGTGGAGTGCCTTATACAGCTTTGCCATTGGCTACAGTTATCTGTTCAACCAATCA AATTCCAATGCTTATTAGAAGGAAAGAAACAAAGGATTATGGAACTAAGCGTCTTGTAGAAGGAACTATTAATCC AGGAGAAACCTGTTTAATCATTGAAGATGTTGTCACCAGTGGATCTAGTGTTTTTGGAAACTGTTGAGGTTCTTCA GAAGGAGGCTTGAAGGTCACTGATGCCATAGTGCTGTTGGACAGAGCAGGGAGGCAAGGACAAGTTGCAGGC GCACGGGATCCGCCTCCACTCAGTGTGTACATTGTCCAAAATGCTGGAGATTCTCGAGCAGCAGAAAAAAGTTGA TGCTGAGACAGTTGGGAGAGTGAAGAGGTTTATTCAGGAGAATGTCTTTGTGGCAGCGAATCATAATGGTTCTCC CCTTTCTATAAAGGAAGCACCCAAAGAACTCAGCTTCGGTGCACGTGCAGAGCTGCCCAGGATCCACCCAGTTGC ATCGAAGCTTCTCAGGCTTATGCAAAAGAAGGAGACCAATCTGTGTCTATCTGCTGATGTTTCACTGGCCAGAGA GCTGTTGCAGCTAGCAGATGCTTTAGGACCTAGTATCTGCATGCTGAAGACTCATGTAGATATTTTGAATGATTT TACTCTGGATGTGATGAAGGAGTTGATAACTCTGGCAAAATGCCATGAGTTCTTGATATTTGAAGACCGGAAGTT TGCAGATATAGGAAACACAGTGAAAAAGCAGTATGAAGGAGGTATCTTTAAAATAGCTTCCTGGGCAGATCTAGT CCTCCTTATTGCGGAAATGAGCTCCACCGGCTCCCTGGCCACTGGGGACTACACTAGAGCAGCGGTTAGAATGGC TGAGGAGCACTCTGAATTTGTTGTTGGTTTTATTTCTGGCTCCCGAGTAAGCATGAAACCAGAATTTCTTCACTT GACTCCAGGAGTTCAGTTGGAAGCAGGAGGAGATAATCTTGGCCAACAGTACAATAGCCCACAAGAAGTTATTGG CAAACGAGGTTCCGATATCATCATTGTAGGTCGTGGCATAATCTCAGCAGCTGATCGTCTGGAAGCAGCAGAGAT GTACAGAAAAGCTGCTTGGGAAGCGTATTTGAGTAGACTTGGTGTTTTGAGTGCTTCAGATACATTTTTCAGATAC TTCTTCCACAGGGCCTGTGTAAGAATGGGTTCTGGAGTTCTCATGGTCTTTAGGAAATATTGAGTAATTTGTAAT TATTTATTTTTTAATTTTTTTCGAGACAGGATCTCACTCTGTTGCCCAGGATGGAGTGCAGTGGTGAGATCACGG CTCATTGCAGCCTCGACCTCCCAGGTGATCCTCCCACCTCAGCTTCCAGATTAGCTGGTGCTATAGGCATGCACC ACCACGTCCATCTAAATTTCTTTATTATTTGTAGAGATGAGGTCTTGCCATGTTACCCAGGCTGGTCTCAACTCC TGGGCTCAAGCGATCCTCCTGCCTCAGTCTCTCAAAGTGCTGGGATTACAGGTGTGAGCCACTGTGCCCAGCCTA ATTGCAGTAAGACAAAATTCTAGGGCACCAAGAGGCTAAAGTCAGCACAGCTTTTCTTGTGTCCTGTATT

PCT/US2003/028547

1327/6881 FIGURE 1235

PCT/US2003/028547

FIGURE 1236

 $\label{thm:mass} MGSTESSEGRRVSFGVDEEERVRVLQGVRLSENVVNRMKEPSSPPPAPTSSTFGLQDGNLRAPHKESTLPRSGSS\\ GGQQPSGMKEGVKRYEQEHAAIQDKLFQVAKREREAATKHSKASLPTGEGSISHEEQKSVRLARELESREAELRR\\ RDTFYKEQLERIERKNAEMYKLSSEQFHEAASKMESTIKPRRVEPVCSGLQAQILHCYRDRPHEVLLCSDLVKAY\\ QRCVSAAHKG$

PCT/US2003/028547

1329/6881 FIGURE 1237

GAGAGTGGCCAGCGAGGGCAGCGTTCGCCGCCCCTCAGGCCCCGTCCCGGCGCCGCAGCCGCCTGCGTTTCGGTT TGTGAGCAGGCCCGGCCCGGGCCAGGAGCGAGACTCTGGAGCGGTCGCCGCAGTCGCCCGGGCCGGG AAAGGCGGCGATGCCCCCAACCGCCGCTCGGGCCATGTCCGAGGGGCGCGTGTTGTCGCCGCCGGGGCGCCG TGCCCGCCTGTCGTCCCCGGGCCCAGCCGCTCGTCCGAGGCCCGCGAGGAGCTGCGCCGCCACCTCGTGGGCCT CATCGAGCGCAGCCGGGTGGTGATCTTCAGCAAGAGCTACTGTCCCCATAGTACTCGGGTGAAAGAACTCTTTTC TTCTTTGGGAGTCGAATGTAATGTCTTGGAACTTGATCAAGTTGATGGGGGCCAGGGTTCAAGAAGTGCTGTC AGAAATCACTAATCAGAAAACTGTGCCCAATATTTTCGTGAATAAAGTGCATGTAGGTGGATGTGACCAAACTTT CCAGGCATATCAGAGTGGTTTGTTACAGAAGCTCCTTCAGGAAGATTTGGCATATGATTATGATCTCATCAT TGTTGTCCCGTCACCTCAGGGCACATCCTGGGGTCTTGGTGGCACTTGTGTAAATGTAGGTTGTATTCCTAAGAA ATTGATGCATCAGGCTGCCCTTTTGGGGCAGGCATTATGTGACTCAAGGAAATTTGGCTGGGAATATAATCAACA AGTGAGGCACAACTGGGAGACAATGACAAAAGCGATTCAGAACCACATCAGCTCTCTAAACTGGGGCTACAGGTT GTCTCTGAGGGAAAAGGCTGTGGCCTATGTCAATTCCTATGGAGAATTTGTTGAACATCATAAAATAAAGGCAAC CAATAAAAAAGGACAGGAGACTTATTATACTGCTGCACAGTTTGTCATAGCAACGGGTGAAAGGCCACGGTATTT AGGAATCCAAGGAGATAAAGAATACTGTATTACTAGTGATGACCTTTTTTCTCTGCCTTATTGCCCTGGCAAAAC TATGGTACGCTCAATCCTTCTCCGTGGCTTCGACCAAGAAATGGCAGAAAAAGTGGGTTCCTACATGGAGCAGCA TGGTGTGAAGTTCCTACGGAAATTCATACCTGTGATGGTTCAACAGTTGGAGAAAGGTTCACCTGGAAAGCTGAA AGTGTTGGCTAAATCCACTGAAGGAACAGAAACAATTGAAGGAGTCTATAACACAGTTTTGTTAGCTATTGGTCG TGACTCCTGTACAAGGAAAATAGGCTTGGAGAAGATTGGTGTCAAAATTAATGAGAAGAGTGGAAAAATACCTGT AAATGATGTGGAACAGACCAATGTGCCATATGTCTATGCTGTTGGTGATATTTTGGAGGATAAGCCAGAGCTCAC TCCTGTCGCCATACAGTCAGGCAAGCTGCTAGCTCAGAGACTTTTTGGGGCCCTCTTTAGAAAAGTGTGATTATAT TAATGTTCCGACTACAGTGTTTACTCCTCTGGAGTATGGTTGCTGTGGATTATCTGAAGAGAAAGCTATTGAAGT ATATAAAAAAGAGAATCTAGAAATATATCATACTTTGTTCTGGCCTCTTGAATGGACAGTAGCTGGCAGAGAGAA CAACACTTGTTATGCAAAGATAATCTGCAATAAATTCGACCATGATCGGGTGATAGGATTTCATATTCTTGGACC AAACGCCGGTGAGGTTACCCAAGGATTTGCAGCTGCAATGAAATGTGGGCTCACAAAACAGCTACTTGATGACAC CATTGGAATTCACCCCACATGTGGGGAGGTGTTCACGACTTTGGAAATCACAAAGTCGTCAGGACTAGACATCAC TCAGAAAGGCTGCTGAGGCCTAGGCCTGCTGTTTAGTTCTCCTTGTCATATTCTCATTTCTCTCAAAGATAAG AATGCTCTCGGATAAAATGAGCCTGTGCTCATGACAGCTGCTCTGTTACTCAGGGACCAGTGCAGGGCTGTCTTA CGACACTTAGATGAGAAAGTAGACAAGGAAAGAGGACAGCAGTGGGCATCTGCCTTGTGGTCTTGCTGACAGCGA GAAGCAGTGGGACTGCTTCCTTGACGCCTTAGCTTGGAGCCCGTTATGAGGTGAGCCAAGGCTGACTCTCGCAA GCCAGGACTGAGCTTCCCTCGGAAAGACCTTTGAGTGGCACCATTCACCTAAGTTAGCTTTTCTGGTCGCTATTG TTTTTATCCCCTTTGCTTTGTTGTTTCTGTGAAAATATATTTTCAGTTAAGAAATGCTATAAAGTAGTGGTTTTC TAGTGCGTGGGCCTAGAATTCACACATGCTCACTGGTGAACAGTGTCTGTGGGCTGCTGTGGGCTGCATTTGGAT CCCCTAATTAATATCTCGAGACTGAGCAAAATATCTCATGTAAGATAAAAGTACTTGAATTGCTTTTTCATGTTC TCCATCACAGTCTGTTTAATGATGATAAAGTTCCATAAATGAATACAGGT

PCT/US2003/028547

1330/6881 FIGURE 1238A

CTCTCGGCGGAGCTGCTGTGCAGTGGAACGCGCTGGGCCGGGCAGCGTCGCCTCACGCGGAGCAGAGCTGAGC TGAAGCGGGACCCGAGCCCGAGCAGCCGCCGCCATCGCAATCTTCTGGAAGTCATCAAGCCCTTCTGTGT CATCCTGCCGGAAATTCAGAAGCCAGAGAGAGATTCAGTTTAAGGAGAAAGTGCTGTGGACCGCTATCACCCT CTTTATCTTCTTAGTGTGCCCAGATTCCCCTGTTTGGGATCATGTCTTCAGATTCAGCTGACCCTTTCTATTG GATGAGAGTGATTCTAGCCTCTAACAGAGGCACATTGATGGAGCTAGGGATCTCTCCTATTGTCACGTCTGGCCT TATAATGCAACTCTTGGCTGGCGCCAAGATAATTGAAGTTGGTGACACCCCAAAAGACCGAGCTCTCTTCAACGG AGCCCAAAAGTTATTTGGCATGATCATTACTATCGGCCAGTCTATCGTGTATGTGATGACCGGGATGTATGGGGA CCCTTCTGAAATGGGTGCTGGAATTTGCCTGCTAATCACCATTCAGCTCTTTGTTGCTGGCTTAATTGTCCTACT TTTGGATGAACTCCTGCAAAAAGGATATGGCCTTGGCTCTGGTATTTCTCTCTTCATTGCAACTAACATCTGTGA AACCATCGTATGGAAGGCATTCAGCCCCACTACTGTCAACACTGGCCGAGGAATGGAATTTGAAGGTGCTATCAT CGCACTTTTCCATCTGCTGGCCACACGCACAGACAAGGTCCGAGCCCTTCGGGAGGCGTTCTACCGCCAGAATCT TCCCAACCTCATGAATCTCATCGCCACCATCTTTGTCTTTGCAGTGGTCATCTATTTCCAGGGCTTCCGAGTGGA CCTGCCAATCAAGTCGGCCCGCTACCGTGGCCAGTACAACACCTATCCCATCAAGCTCTTCTATACGTCCAACAT CCCCATCATCCTGCAGTCTGCCCTGGTGTCCAACCTTTATGTCATCTCCCAAATGCTCTCAGCTCGCTTCAGTGG CAACTTGCTGGTCAGCCTGCTGGGCACCTGGTCGGACACGTCTTCTGGGGGCCCAGCACGTGCTTATCCAGTTGG TGGCCTTTGCTATTACCTGTCCCCTCCAGAATCTTTTGGCTCCGTGTTAGAAGACCCGGTCCATGCAGTTGTATA CATAGTGTTCATGCTGGGCTCCTGTGCATTCTTCTCCAAAACGTGGATTGAGGTCTCAGGTTCCTCTGCCAAAGA TGTTGCAAAGCAGCTGAAGGAGCAGCAGATGGTGATGAGAGGCCACCGAGAGACCTCCATGGTCCATGAACTCAA CCGGTACATCCCCACAGCCGCGCCTTTGGTGGGCTGTGCATCGGGGCCCTCTCGGTCCTGGCTGACTTCCTAGG CGCCATTGGGTCTGGAACCGGGATCCTGCTCGCAGTCACAATCATCTACCAGTACTTTGAGATCTTCGTTAAGGA ${\tt GCAAAGCGAGGTTGGCAGCATGGGGGCCCTGCTCTC} \underline{{\tt TGA}}{\tt GCCCGTCTCCCGGACAGGTTGAGGAAGCTGCTCCA}$ GAAGCGCCTCGGAAGGGGAGCTCTCATCATGGCGCGTGCTGCTGCGGCATATGGACTTTTAATAATGTTTTTGAA TTTCGTATTCTTTCATTCCACTGTGTAAAGTGCTAGACATTTTCCAATTTAAAATTTTGCTTTTTATCCTGGCAC TGGCAAAAAGAACTGTGAAAGTGAAATTTTATTCAGCCGACTGCCAGAGAAGTGGGAATGGTATAGGATTGTCCC ${\tt CAAGTGTCCATGTAACTTTTGTTTTAACCTTTGCACCTTCTCAGTGCTGTATGCGGCTGCAGCCGTCTCACCTGT}$ TTCCCCACAAAGGGAATTTCTCACTCTGGTTGGAAGCACAAACACTGAAATGTCTACGTTTCATTTTGGCAGTAG GGTGTGAAGCTGGGAGCAGATCATGTATTTCCCGGAGACGTGGGACCTTGCTGGCATGTCTCCTTCACAATCAGG CGTGGGAATATCTGGCTTAGGACTGTTTCTCTCTAAGACACCATTGTTTTCCCTTATTTTAAAAGTGATTTTTTT AAGGACAGAACTTCTTCCAAAAGAGAGGGATGGCTTTCCCAGAAGACACTCCTGGCCATCTGTGGATTTGTCTGT GCACCTATTGGCTCTAGCTGACTCTTCTGGTTGGGCTTAGAGTCTGCCTGTTTCTGCTAGCTCCGTGTTTAG ${\tt TCCACTTGGGTCATCAGCTCTGCCAAGCTGAGCCTGGCCAAGCTAGGTGACAGACCCTTGCAGTGATGTCCGTT}$ TGTCCAGATTCTGCCAGTCATCACTGGACACGTCTCCTCGCAGCTGCCCTAGCAAGGGGAGACATTGTGGTAGCT ATCAGACATGGACAGAAACTGACTTAGTGCTCACAAGCCCCTACACCTTCTGGGCTGAAGATCACCCAGCTGTGT TCAGAATTTTCTTACTGTGCTTAGGACTGCACGCAAGTGAGCAGACACCACCGACTTCCTTTCTGCGTCACCAGT GTCGTCAGCAGAGAGAGACAGCACAGGCTCAAGGTTGGTAGTGAAGTCAGGTTCGGGGTGCATGGGCTGTGGTG GTGTTGATCAGTTGCTCCAGTGTTTGAAATAAGAAGACTCATGTTTATGTCTGGAATAAGTTCTGTTTTGTGCTGA CAGGTGGCCTAGGTCCTGGAGATGAGCACCCTCTCTCTGGCCTTTAGGGAGTCCCCTCTTAGGACAGGCACTGCC CAGCAGCAAGGGCAGCAGAGTTGGGTGCTAAGATCCTGAGGAGCTCGAGGTTTCGAGCTGGCTTTAGACATTGGT $\verb|CCCCACTCTGACAGTGGGCACACGGCAGGCCTGCAAAGCACAGGGCCACCGCCACAGCCCGGCAGAGGGGCACACT| \\$ CTGGAGACCTTGCTGGCAGTGCTAGCCAGGAAACAGAGTGACCAAGGGACAAGAAGGGACTTGCCTAAAGCCACC CAGCAACTCAGCAGCAGAACCAAGATGGGCCCCAGGCTCCTCCATATGGCCCAGGGCTTACCACCCTATCACACG TGGCCTTGTCTAGACCCAGTCCTGAGCAGGGGAGAGGCTCTTGAGACCTGATGCCCTCCTACCCACATGGTTCTC CCACTGCCCTGTCTGCTGCTGCTACAGAGGGGCCAGGCCCCAGCCCACGCTTAGGAATGCTTGCCTCTG GCAGGCAGCTGTACCCAAGCTGGTGGGCAGGGGGCTGGAAGGCACCAGGCCTCAGGAGGAGCCCCATAGTC $\verb|CCGCCTGCAGCCTGTAACCATCGGCTGGGCCCTGCAAGGCCCACACTCACGCCCTGTGGGTGATGGTCACGGTGG|\\$ GTGGGTGGGGGCTGACCCCAGCTTCCAGGGGACTGTCACTGTGGACGCCAAAATGGCATAACTGAGATAAGGTGA

PCT/US2003/028547

FIGURE 1238B

PCT/US2003/028547

1332/6881 FIGURE 1239

MAIKFLEVIKPFCVILPEIQKPERKIQFKEKVLWTAITLFIFLVCCQIPLFGIMSSDSADPFYWMRVILASNRGT LMELGISPIVTSGLIMQLLAGAKIIEVGDTPKDRALFNGAQKLFGMIITIGQSIVYVMTGMYGDPSEMGAGICLL ITIQLFVAGLIVLLLDELLQKGYGLGSGISLFIATNICETIVWKAFSPTTVNTGRGMEFEGAIIALFHLLATRTD KVRALREAFYRQNLPNLMNLIATIFVFAVVIYFQGFRVDLPIKSARYRGQYNTYPIKLFYTSNIPIILQSALVSN LYVISQMLSARFSGNLLVSLLGTWSDTSSGGPARAYPVGGLCYYLSPPESFGSVLEDPVHAVVYIVFMLGSCAFF SKTWIEVSGSSAKDVAKQLKEQQMVMRGHRETSMVHELNRYIPTAAAFGGLCIGALSVLADFLGAIGSGTGILLA VTIIYQYFEIFVKEQSEVGSMGALLF

PCT/US2003/028547

1333/6881 FIGURE 1240

PCT/US2003/028547

FIGURE 1241

MVDRLRPVKFPLLMGQPEAQGQPGPAGAPGQRATLAAAETEIRGVTARSGAGHQAPSPAGLLAAAGPFSALPEAE FPEREAAGPRGSREQPGREDVGSRHPRLGTAAFQQPLAFIEPLSSPARRSRGESHATAEETEAGRVTHSPVVAGG RPGCHRAEDRPLCQPGGVGQDSRALARAQSPTLPRSCRWSGDFVQGREPEEEARLAAGQLAHGTWGVMTPAFMER LLCALQVSNVRLREEKQKARRLEWVRHPSGAWHEYDSSLTQSPGGMSAGAIAGTRTQA

PCT/US2003/028547

1335/6881 FIGURE 1242

AGGTAAAGGGAGAAGATGAGGAAGAACAATTTGGAAGTACGTGAAACCAAAATTAAGGGTAAAAGTGGGAGAT TCTTCACAGTCAAGCTCCCAGTTGCTCTTGATCCTGGGGCCAAGATTTCAGTCATTGTGGAAACAGTCTACACCC ATGTGCTTCATCCATATCCAACCCAGATCACCCAGTCAGAGAAACAGTTTGTGGTGTTTGAGGGGAACCATTATT TCTACTCTCCCTATCCAACGAAGACACAAACCATGCGTGTGAAGCTTGCCTCTCGAAATGTGGAGAGCTACACCA ATACTTTTAAAGTACATTATGAGAACAACAGCCCTTTCCTGACCATCACCAGCATGACCCGAGTCATTGAAGTCT $\tt CTCACTGGGGTAATATTGCTGTGGAAGAAAATGTGGACTTAAAGCACAGGAGCTGTGCTTAAGGGGCCTTTCT$ CTGCCCAGGATGTTTATTACCGGGATGAGATTGGCAATGTTTCTACCAGCCACCTCCTTATTTTGGATGACTCTG TAGAGATGGAAATCCGGCCTCGCTTCCCTCTCTTTGGCGGGTGGAAGACCCATTACATCGTTGGCTACAACCTCC CAAGCTATGAGTACCTCTATAATTTGGGTGACCAGTATGCACTGAAGATGAGGTTTGTGGACCATGTGTTTGATG ATGAAATCAGCCGTGCCCCAGATGAGCTGCACTACACCTATCTGGATACATTTGGCCGCCCTGTGATTGTTGCCT ACAAGAAAAATCTGGTAGAACAGCACATTCAGGACATTGTGGTCCACTACACGTTCAACAAGGTGCTCATGCTGC AGGAGCCCCTGCTGGTGGCGGCCCTTCTACATCCTGTTCTTCACCGTTATCATCTATGTTCGGCTGGACTTCT CCATCACCAAGGATCCAGCCGCAGAAGCCAGGATGAAGGTAGCCTGCATCACAGAGCAGGTCTTGACCCTGGTCA ACAAGAGAATAGGCCTTTACCGTCACTTTGACGAGACCGTCAATAGGTACAAGCAATCCCGGGACATCTCCACCC TCAACAGTGGCAAGAAGAGCCTGGAGACTGAACACAAGGCCTTGACCAGTGAGATTGCACTGCTGCAGTCCAGGC TGAAGACAGAGGGCTCTGATCTGTGCGACAGAGTGAGCGAAATGCAGAAGCTGGATGCACAGGTCAAGGAGCTGG AGCTCATCTCAGGAAAGCGCCAGGAGCTGGTCACCAAGATCGACCACATCCTGGATGCCCTGTAGCCCCTGCCCG GAGGCCAGTGAAAGCTGACATCTGTAAAAGGCCTTCAAGGAAGAGAAACCAGGCCCTGCGTCAGGCAGTGTGAGT AAACATCTTTGTGTTTTGAACAAAGGAATTTTCAATATTTGATTGGTATTCTGTTCTGAAGTCTAGGATATTTTT CAGCCTATAAAGCCCCCTGTTTTATGCCCTTCTAATTCTGATGTTTTGGGTATTGTGTGAGTGCATGTTTTTTT TTTTTTTTTTAAAGCGTGTGTGAACAAATGGAAATAAAGCAGGGACTGTG

PCT/US2003/028547

1336/6881 FIGURE 1243

CTGCTCTTCCCGGTCATGGAGGCGCCAGCCGCCTGTTTCTGCTCCTGTTGCTTGGGACTTGGGCCCCGGCG CCGGGCAGCGCCTCCTCCGAGGCACCGCCGCTGATCAATGAGGACGTGAAGCGCACAGTGGACCTAAGCAGCCAC CTGGCTAAGGTGACGGCCGAGGTGGTCCTGGCGCACCTGGGCGGCGCTCCACGTCCCGAGCTACCTCTTTCCTG CTGGCTTTGGAGCCTGAGGCCCGGCTGGCGCACCTGGGCGTGCAGGTAAAGGGAGAAGATGAGGAAGAG AACAATTTGGAAGTACGTGAAACCAAAATTAAGGGTAAAAGTGGGAGATTCTTCACAGTCAAGCTCCCAGTTGCT CTTGATCCTGGGGCCAAGATTTCAGTCATTGTGGAAACAGTCTACACCCATGTGCTTCATCCGTATCCAACCCAG ATCACCCAGTCAGAGAAACAGTTTGTGGTGTTTTGAGGGGAACCATTATTTCTACTCTCCCTATCCAACGAAGACA CAAACCATGCGTGTGAAGCTTGCCTCTCGAAATGTGGAGAGCTACACCAAGCTGGGGAACCCCACGCGCTCTGAG AACAGCCCTTTCCTGACCATCACCAGCATGACCCGAGTCATTGAAGTCTCTCACTGGGGTAATATTGCTGTGGAA GAAAATGTGGACTTAAAGCACACAGGAGCTGTGCTTAAGGGGCCTTTCTCACGCTATGATTACCAGAGACAGCCA GAGATTGGCAATGTTTCTACCAGCCACCTCCTTATTTTGGATGACTCTGTAGAGATGGAAATCCGGCCTCGCTTC CCTCTCTTTGGCGGGTGGAAGACCCATTACATCGTTGGCTACAACCTCCCAAGCTATGAGTACCTCTATAATTTG GGTGACCAGTATGCACTGAAGATGAGGTTTGTGGACCATGTGTTTGATGAACAAGTGATAGATTCTCTGACTGTG AAGATCATCCTGCCTGAAGGAGCCAAGAACATTGAAATTGATAGTCCCTATGAAATCAGCCGTGCCCCAGATGAG CTGCACTACACCTATCTGGACACATTTGGCCGCCCTGTGATTGTTGCCTACAAGAAAAATCTGGTAGAACAGCAC ATTCAGGACATTGTGGTCCACTACACGTTCAACAAGGTGCTCATGCTGCAGGAGCCCCTGCTGGTGGTGGCGGCC TTCTACATCCTGTTCTTCACCGTTATCATCTATGTTCGGCTGGACTTCTCCATCACCAAGGATCCAGCCGCAGAA GCCAGGATGAAGGTAGCCTGCATCACAGAGCAGGTCTTGACCCTGGTCAACAAGAGAATAGGCCTTTACCGTCAC TTTGACGAGACCGTCAATAGGTACAAGCAATCCCGGGACATCTCCACCCTCAACAGTGGCAAGAAGAGCCTGGAG ACTGAACACAAGGCCTTGACCAGTGAGATTGCACTGCTGCAGTCCAGGCTGAAGACAGAGGGCTCTGATCTGTGC GACAGAGTGAGCGAAATGCAGAAGCTGGATGCACAGGTCAAGGAGCTGGTGCTGAAGTCGGCGGTGGAGGCTGAG CGCCTGGTGGCTGGCAAGCTCAAGAAAGACACGTACATTGAGAATGAGAAGCTCATCTCAGGAAAGCGCCAGGAG CTGGTCACCAAGATCGACCACATCCTGGATGCCCTGTAGCCCCTGCCCGCATCCTCCAGGGGGCCCAGGGTGCCT GCACTTTGCTGTGGCAGGCAGATTGGGTGGTAGTGGGAGGTTGTGCATGGAGGCCAGTGAAAGCTGACATCTGTA TTTTTTTTTTAAAAAAAGAAACTTTAAAAAAACTCCCATTAAAAACAACATCTTTGTGTTTTTGAACAAAGG AATTTTCAATATTTGATTGGTATTCTGTTCTGAAGTCTAAGATATTTTTCAGCCTATAAAGCCCCCTGTTTTATG AATGGAAATAAAGCAGGGACTGTG

PCT/US2003/028547

FIGURE 1244

CATCCATCCTAGCAGGGCCCCGTCGCCCACCAGGCGGACAAAAGCGGTCCGCTGAACACCATGCGGCCGCTCGGC GTGCCGCCCAGGCTCTGCTGGTGAGCGCCGCCACCCCGCGCCCAGGTCCCGCGAGCCCGCCTGCCGCGCACCTCG TCTGCACCCAGACCCTGAGCCGCCGCCGCCGCCATGGAGGTGGCGCCCGAGCAGCCGCGCTGGATGGCGCACCC GGCCGTGCTGAATGCGCAGCACCCCGACTCACACCACCCGGGCCTGGCGCACAACTACATGGAACCCGCGCAGCT GCTGCCTCCAGACGAGGTGGACGTCTTCTTCAATCACCTCGACTCGCAGGGCAACCCCTACTATGCCAACCCCGC TCACGCGCGGCGCGCCTCTCCTACAGCCCCGCGCAGCCCGCCTGACCGGAGGCCAGATGTGCCGCCCACACTTG TTGCACAGCCCGGGTTTGCCCTGGCTGGACGGGGGCAAAGCAGCCCTCTCTGCCGCTGCGGCCCACCACCACAAC CCCTGGACCGTGAGCCCCTTCTCCAAGACGCCACTGCACCCCTCAGCTGCTGGAGGCCCTGGAGGCCCACTCTCT CACTCTGGCTCCCACCTTTTCGGCTTCCCACCCCACGCCACCCAAAGAAGTGTCTCCTGACCCTAGCACCACGGGG GCTGCGTCTCCAGCCTCATCTTCCGCGGGGGGTAGTGCAGCCCGAGGAGAGGACAAGGACGGCGTCAAGTACCAG GTGTCACTGACGGAGAGCATGAAGATGGAAAGTGGCAGTCCCCTGCGCCCAGGCCTAGCTACTATGGGCACCCAG CCTGCTACACCACCCCATCCCCACCTACCCTCTATGTGCCGGCGGCTGCCCACGACTACAGCAGCGGACTC TTCCACCCGGAGGCTTCCTGGGGGGACCGGCCTCCAGCTTCACCCCTAAGCAGCGCAGCAAGGCTCGTTCCTGT TCAGAAGGCCGGGAGTGTGTCAACTGTGGGGCCACAGCCACCCCTCTCTGGCGGCGGGACGGCACCGGCCACTAC CTGTGCAATGCCTGTGGCCTCTACCACAAGATGAATGGGCAGAACCGACCACTCATCAAGCCCAAGCGAAGACTG TCGGCCGCCAGAAGAGCCGGCACCTGTTGTGCAAATTGTCAGACGACAACCACCACCTTATGGCGCCGAAACGCC AACGGGGACCCTGTCTGCAACGCCTGTGGCCTCTACTACAAGCTGCACAATGTTAACAGGCCACTGACCATGAAG AAGGAAGGGATCCAGACTCGGAACCGGAAGATGTCCAACAAGTCCAAGAAGAGCAAGAAAGGGGCGGAGTGCTTC GTGGGCCACCTCCGCCCTTCAGCCACTCCGGACACATCCTGCCCACTCCGACGCCCATCCACCCCTCCTCCAGC CTCTCCTTCGGCCACCCCCACCCGTCCAGCATGGTGACCGCCATGGGCTAGGGAACAGATGGACGTCGAGGACCG GGCACTCCCGGGATGGGTGGACCAAACCCTTAGCAGCCCAGCATTTCCCGAAGGCCGACACCACTCCTGCCAGCC CGGCTCGGCCCAGCACCCCCTCTCCTGGAGGGCGCCCAGCAGCCTGCCAGCAGTTACTGTGAATGTTCCCCACCG CTGAGAGGCTGCCTCCGCACCTGACCGCTGCCCAGGTGGGGTTTCCTGCATGGACAGTTGTTTGGAGAACAACAA GGACAACTTTATGTAGAGAAAAGGAGGGGACGGGACAGACGAAGGCAACCATTTTTAGAAGGAAAAAGGATTAGG CAAAAATAATTTATTTTGCTCTTGTTTCTAACAAGGACTTGGAGACTTGGTGGTCTGAGCTGTCCCAAGTCCTCC GGTTCTTCCTCGGGATTGGCGGGTCCACTTGCCAGGGCTCTGGGGGGCAGATTTGTGGGGACCTCAGCCTGCACCC TCTTCTCCTCTGGCTTCCCTCTCTGAAATAGCCGAACTCCAGGCTGGGCTGAGCCAAAGCCAGAGTGGCCACGGC CCAGGGAGGGTGAGCTGGTGCCTGTTTGACGGGCCAGGCCCTGGAGGGCAGAGACAATCACGGGCGGTCCTGCA CAGATTCCCAGGCCAGGGCTGGGTCACAGGAAGGAAACAACATTTTCTTGAAAGGGGAAACGTCTCCCAGATCGC TCCCTTGGCTTTGAGGCCGAAGCTGCTGTGACTGTCCCCTTACTGAGCGCAAGCCACAGCCTGTCTTGTCAGG TGGACCCTGTAAATACATCCTTTTTCTGTTAACCCTTCAACCCCCTCGCCTACTACTCTGAGAC

PCT/US2003/028547

1338/6881 FIGURE 1245

PCT/US2003/028547

1339/6881 FIGURE 1246

GGCACGAGGATAAAGCCTGAGGCGGCGGCAGCGGCGGAGTTGGCGGCTTGGAGAGCTCGGGAGAGTTCCCTGGAA CCAGAACTTGGACCTTCTCGCTTCTGTCCTCCGTTTAGTCTCCTCCTCGGGGGAGCCCTCGCGACGCGCCGGC CCGGAGCCCCAGCGCAGCGCCGCGTTTGAAGGATGACCTCTAGGAAGAAAGTGTTGCTGAAGGTTATCATCCT GGGAGATTCTGGAGTCGGGAAGACATCACTCATGAACCAGTATGTGAATAAGAAATTCAGCAATCAGTACAAAGC CACAATAGGAGCTGACTTTCTGACCAAGGAGGTGATGGTGGATGACAGGCTAGTCACAATGCAGATATGGGACAC AGCAGGACAGGAACGGTTCCAGTCTCTCGGTGTGGCCTTCTACAGAGGTGCAGACTGCTGCGTTCTGGTATTTGA ${\tt TGTGACTGCCCCAACACATTCAAAACCCTAGATAGCTGGAGAG} {\tt ATG} {\tt AGTTTCTCATCCAGGCCAGTCCCCGAGA}$ TCCTGAAAACTTCCCATTTGTTGTGTGGGAAACAAGATTGACCTCGAAAACAGACAAGTGGCCACAAAGCGGGC ACAGGCCTGGTGCTACAGCAAAAACAACATTCCCTACTTTGAGACCAGTGCCAAGGAGGCCATCAACGTGGAGCA GGCGTTCCAGACGATTGCACGGAATGCACTTAAGCAGGAAACGGAGGTGGAGCTGTACAACGAATTTCCTGAACC TATCAAACTGGACAAGAATGACCGGGCCAAGGCCTCGGCAGAAAGCTGCAGTTGCTGAGGGGGCAGTGAGAGTTG ATACATTGATCTCTCACATCCAGCTGCCAAAAGAAAACCCCATCAAACACAGTTACACCCCACATATCTCGCACA CACACACACACACACACACACACACACAGATCTGACGTAATCAAACTCCAGCCCTTGCCCGTGATGGCTCCTT GGGGTCTGCCTGCCCACCACATGAGCCCGCGAGTATGGCAGCAGGACAAGCCAGCGGTGGAAGTCATTCTGATA ATTATCTGATTTTTTTTTTTTTTGTCTTGTGGTCTTTTTACCCCCCCTTTCCCCTCCTTGAAGGCTACCCCTT TGTTAATGCTTGTTACTTTAACTAATCAGATCTTTTTACAGTATCCATTTATTATGTAATGCTTCTTAGAAAAG

PCT/US2003/028547

1340/6881 FIGURE 1247

MSFSSRPVPEILKTSHLLCWETRLTSKTDKWPQSGHRPGATAKTTFPTLRPVPRRPSTWSRRSRRLHGMHLSRKR RWSCTTNFLNLSNWTRMTGPRPRQKAAVAEGAVRVEHRVLHKPRTHVGLQHNSPLLFQTKHTLISHIQLPKENPI KHSYTPHISHTHTHTHTHTHRSDVIKLQPLPVMAPWGLPAHPHEPASMAAGQASGGSHSDMELALEAYSFCSLER ERTVYS

PCT/US2003/028547

FIGURE 1248

AGAATCTTCAGTTTCTGTGAGCGTCCGCTTCGTCTGGGCACTTCCGGTACTCCCATTCAGTTCCGGTCCCTGTCT TTTACGTTTCCGGCAAAACATCAGTGTCTGTGGGTAGTTGGAATCTTCAGTTCCTGTGAGCGTCGGCGTCTTCTG ${\tt GGCCTGTGGAGTTTCTTGGACAGGGGCCGCGGGGCTCCAGGACGCCCCTTAGCGACACC\underline{\textbf{ATC}}{\tt GCCCGAAATGC}}$ AGAAAAGGCCATGACGGCCTTAGCAAGATTTCGCCAGGCTCAGCTGGAAGAGGGAAAAGTGAAGGAACGAAGACC CTTTCTGGCCTCAGAATGTACTGAACTGCCTAAAGCTGAGAAGTGGAGACGACAGATCATTGGAGAGATCTCTAA AAAAGTGGCTCAGATTCAGAATGCTGGTTTAGGTGAATTTCGAATTCGTGACCTGAATGATGAAAATTAACAAGCT GCTAAGGGAGAAAGGACACTGGGAGGTCCGGATAAAGGAGCTGGGAGGTCCTGATTATGGAAAAGTTGGCCCTAA AATGCTGGATCATGAAGGAAAAGAAGTCCCAGGAAACCGAGGTTACAAGTACTTTGGAGCAGCAAAAGATTTGCC TGGTGTTAGAGAGCTGTTTGAAAAAGAACCTCTTCCTCCTCCCAGAAAGACACGTGCTGAGCTCATGAAGGCAAT CGATTTTGAGTACTATGGTTACCTAGATGAAGATGATGGTGTTATTGTGCCTTTGGAACAGGAATATGAAAAGAA GGAGGAAGAGGAGGAAGATCAACATCTATGCAGTCACCGAGGAGGAGTCGGACGAGGAAGGCAGCCAGGAGAA AGGAGGGGACGACAGCCAGCAGAAGTTCATTGCTCACGTCCCTGTTCCCTCGCAGCAAGAGATTGAGGAGGCACT GGTGCGAAGGAAGAAATGGAACTCCTCCAGAAGTATGCAAGCGAGACCCTGCAGGCCCAAAGTGAAGAAGCCAG TGTTGACCGGAGGGTAGGGGTCTGTCCCTGGTCTTCCTGGTAGGTTTTGTACACATATTTTGCTACTGTGGAT CCATTTATTTTATTGTGGAGTGTATACAACAGGTTGCGAACTGGCTGCCTGTGTCTTATTTTGACTTGCACTGC CATTTTGAGGGGAGAAGAATCAATTAGTGGCAAACATTTAAAAAATGCAATTTTTTGCAGACCAAAGTATAATTTT AAAAAATGCAAATTTTCTAAAAGACACATCTCTTGAAAAATGAGATGATGTGGCCAGGCGCAGTGGCTCACGCCT GTAACCCCAGCACTTTGGGAGGCCGAGGCGGGCGGGTCACGAGGTCAAGAGATGGAGACCATCCTGGCCAACATG GTGAAACCCCATGTCTACTAAAAATACAAAAAATTAGCTGGGCGTACTGGCATGCACCTGTAGTCCCAGCTGCT TGGGAGGCTGAGGCAGGAGATCACTTGAACCCGAGAGGTGGAGGTTGAAGTGAGCCAAGATCGTGCCATTGCAC

PCT/US2003/028547

1342/6881 FIGURE 1249

MARNAEKAMTALARFRQAQLEEGKVKERRPFLASECTELPKAEKWRRQIIGEISKKVAQIQNAGLGEFRIRDLND EINKLLREKGHWEVRIKELGGPDYGKVGPKMLDHEGKEVPGNRGYKYFGAAKDLPGVRELFEKEPLPPPRKTRAE LMKAIDFEYYGYLDEDDGVIVPLEQEYEKKLRAELVEKWKAEREARLARGEKEEEEEEEEINIYAVTEEESDEE GSQEKGGDDSQQKFIAHVPVPSQQEIEEALVRRKKMELLQKYASETLQAQSEEARRLLGY

PCT/US2003/028547

FIGURE 1250

GAATTCCAAACAGCCTCTACCTTGCGAGCCGTCTTCCCCAGGCCTGCGTCCGAGTCTCCGCCGCTGCGGGCCCGC ${\tt TCCGACGCGGAAGATCTGACTGCAGCC} {\tt ATG} {\tt AGCAGCAATGAGTGCTTCAAGTGTGGACGATCTGGCCACTGGGCC}$ CGGGAATGTCCTACTGGTGGAGGCCGTGGTCGTGGAATGAGAAGCCGTGGCAGAGGTGGTTTTACCTCGGATAGA GGTTTCCAGTTTGTTTCCTCGTCTCTTCCAGATATTTGTTATCGCTGTGGTGAGTCTGGTCATCTTGCCAAGGAT TGTGATCTTCAGGAGGATGCCTGCTATAACTGCGGTAGAGGTGGCCACATTGCCAAGGACTGCAAGGAGCCCAAG AGAGAGCGAGAGCAATGCTGCTACAACTGTGGCAAACCAGGCCATCTGGCTCGTGACTGCGACCATGCAGATGAG CAGAAATGCTATTCTTGTGGAGAATTCGGACACATTCAAAAAGACTGCACCAAAGTGAAGTGCTATAGGTGTGGT GAAACTGGTCATGTAGCCATCAACTGCAGCAAGACAAGTGAAGTCAACTGTTACCGCTGTGGCGAGTCAGGGCAC $\tt CTTGCACGGGAATGCACAATTGAGGCTACAGCC\underline{TAA} \tt TTATTTTCCTTTGTCGCCCCTCCTTTTTCTGATTGATGG$ TTGTATTATTTCTCTGAATCCTCTTCACTGGCCAAAGGTTGGCAGATAGAGGCAACTCCCAGGCCAGTGAGCTT TTAGTTTGGTAGAGGTGTTATGTATAATGCTTTGTTAAAGAACCCCCTTTCCGTGCCACTGGTGAATAGGGATTG ATGAATGGGAAGAGTTGAGTCAGACCAGTAAGCCCGTCCTGGGTTCCTTGAACATGTTCCCATGTAGGAGGTAAA ACCAATTCTGGAAGTGTCTATGAACTTCCATAAATAACTTTAATTTTAGTATAATGATGGTCTTGGATTGTCTGA CCTCAGTAGCTATTAAATAACATCAAGTAACATCTGTATCAGGCCCTACATAGAACATACAGTTGAGTGGGAGTA AACAAAAAGATAAACATGCGTGTTAATGGCTGTTCGAGAGAAATCGGAATAAAAGCCTAAACAGGAACAACTTCA TCACAGTGTTGATGTTGGACACATAGATGGTGATGGCAAAGGTTTAGAACACATTATTTTCAAAGACTAAATCTA AAACCCAGAGTAAACATCAATGCTCAGAGTTAGCATAATTTGGAGCTATTCAGGAATTGCAGAGAAATGCATTTT CACAGAAATCAAGATGTTATTTTTGTATACTATATCACTTAGACAACTGTGTTTCATTTGCTGTAATCAGTTTTT AAAAGTCAGATGGAAAGAGCAACTGAAGTCCTAGAAAATAGAAATGTAATTTTAAACTATTCCAATAAAGCTGGA

PCT/US2003/028547

FIGURE 1251

 ${\tt MSSNECFKCGRSGHWARECPTGGGRGRGMRSRGRGGFTSDRGFQFVSSSLPDICYRCGESGHLAKDCDLQEDACY} \\ {\tt NCGRGGHIAKDCKEPKREREQCCYNCGKPGHLARDCDHADEQKCYSCGEFGHIQKDCTKVKCYRCGETGHVAINC} \\ {\tt SKTSEVNCYRCGESGHLARECTIEATA} \\ {\tt MSSNECFKCGRSGHVARECTIEATA} \\ {\tt MSSNECFKCSTATA} \\ {\tt MSSNECFKCSTATA} \\ {\tt MSSNECFKCSTATA} \\ {\tt MSSNECFKCSTATA} \\ {\tt$

PCT/US2003/028547

1345/6881 FIGURE 1252

CATGGCTGCCCTCAGATCCCTTGTGAAGCCCAAGATCGTCAAAAAGAGAACCAAGAAATTCATCCGGCACCAGTC AGACCGATATGTCAAAATCAAGATGAGAAGAATAATGTCTGGGGTGAAGGTGAAGCACCCAGCCCAAGACTCAGC AGCCAGGAAGTGGCCCAGCGCTCTTTATACCACGGGTGCAGGAATTCACACAGAAAAGTGGAGGCCAAGGCGTGA GAATTCCTCAATGACTGCCCTCTAAAGGAAGAGGACCAGGCTTCCTGTCAGAGACTGAGGACCCAGGAAGAAACA TGTCTCGGCCCCTGTCCCCCTCCACAATTCAGAGGCCACATTCTAACAGGGGAGGCTGACCAATTAAACAGATAA TGACACCTCCTAGAGCTAAGAGCTCTCCGACTATGAACCAGATGCCTGGAGAACACGGATGAATGGTCTGAGCAT GAGCAGGGGTGGGAGGCAGCGTTAAGGGAGGCATCAGAGTCAGAACCTAGCAAACAAGTGTTTGTGAAGAAGAAT TCATAGAAAAGGGCAATGCGGCATCACATGGGCTAAGGAACAGAGGGGTAGCAGTAGCTGTTGTGCCAAGCTGC AGGTGTTATACACTACCCTCTAGATCTGGGTTTCCTTAAAACACCTTGAGAGGACAACCCTGCAAAGCACGGCAC AGTGGCCGAGAGGGAAAGGAGCATTCGAGGTCTCAGTCCTCGCTCTGAGCCTACTTCTCTGCTTCTGGGCTCCAG CCATCTTTGTGGAAAGGGGGCTGCTAGTGACACCCTCTCAAGGGTCTTTCCAGCTCTAGGTCGGCTGTGCTGGAG TCTAGGATTTGCCCACTGAGAAATCTGTTTCCAAGTTCCTTCAACCTGATGCATCCTGCAGCATCACGGCAGCTG TTCAGAGTGGTCAGAAGGCCCCTGAATGAGCTCAGTAGAGGGAAGCCTGGGAACAGGGAGGCACCTGCAGCTCTA CTCATGGCCTGGCCAGAGCTCAGCAGCTCTTCTCTGCCATCTAGTGGGGATGGCATACCATCACTGGGGACCACC ACAGAGTCTTGCTGTCACCAAGGCTGGAATGCAGTGGCATGATCTCGGCTCACTGTAGCCTCTGTCTCCCTGG TTCAAGCAATTCTGCCCCAGCCTCCCAAGTAGCTGGGACTACAGGCATGCGCCACCACCCAGCTAAGTTTTGT ATTTTTTTAGTAGAGTCAGGGTTTTACTTTGGCCAGGCTGGTCTTAAACTCCTGGCCTCAACTGATCTGCCTGTC TCGGCCTCCCAAAGAACTGGGATTACAGGCATGAGGCACCGTGCCTGTCCCATGTTGTACTTAATAGATATTTAC CATATACAATTATTTTTTAATTTAAATAAATCAATGAACAGTGTTATTTTTT

PCT/US2003/028547

1346/6881 FIGURE 1253

 ${\tt MHPAASRQLFRVVRRPLNELSRGKPGNREAPAALLMAWPELSSSSLPSSGDGIPSLGTTLCKLVSLSACHRGKER} \\ {\tt GGIQDLDEIATPTLLSKSSSFFKTSYCTDFFVFLTESCCVTKAGMQWHDLGSL} \\$

PCT/US2003/028547

1347/6881 FIGURE 1254

GGTGGCGTGGGGACTCCCTGAAAGCAGAGCGGCAGGGCGCCCGGAAGTCGTGAGTCGAGTCTTCCCGGGCTAATC CATGCCGGGTTGGAGGCTGCTGACGCAGGTCGCCCCAGGTGCTGGGTCGACTCGGGGACGGCCTGGGTGCTGC CCTGGGCCCGGGGAACAGAACACATCTGGCTTTTTGTTAGAGGTCTTCATGGAAAGAGTGGTACATGGTGGGA TGAGCATCTTTCTGAAGAAAATGTCCCATTCATTAAGCAGTTGGTCTCTGATGAAGATAAAGCCCAATTAGCAAG TAAACTGTGTCCTCTGAAAGATGAACCATGGCCTATACATCCTTGGGAACCAGGTTCCTTTAGAGTTGGTCTTAT TGCCTTGAAGCTGGGCATGATGCCTTTATGGACCAAGGATGGTCAAAAGCATGTGGTCACATTACTTCAGGTACA AACTGTATCACGTTTTCGTAAAGCTACATCCATATTGGAATTTTACCGGGAACTTGGATTGCCGCCGAAACAGAC AGTTAAAATCTTTAATATAACAGATAATGCTGCAATTAAACCAGGCACTCCTCTTTATGCTGCTCACTTTCGTCC TCGACAGTATGTGGATGTCACAGCCAAATCGTAGTGGTAAAGGTTTTCAAGGTGTCATGAAAAGATGGGGATTTA AAGGCCAGCCTGCTACGCATGGTCAAACGAAAACCCACAGGAGACCTGGAGCTGTTGCAACTGGTGATATTGGCA GAGTCTGGCCTGGAACTAAAATGCCTGGAAAAATGGGAAACATATACAGGACAGAATATGGACTGAAAGTGTGGA GAATAAACACAAAGCACAACATAATCTATGTAAATGGCTCTGTACCTGGACATAAAAATTGCTTAGTAAAGGTCA AAGATTCTAAACTGCCTGCATATAAGGATCTCGGTAAAAATCTACCATTCCCTACATATTTTCCTGATGGAGATG AAGAGGAACTGCCAGAAGATTTGTATGATGAAAACGTGTGTCAGCCCGGTGCGCCTTCTATTACATTTGCCTAAC ATCTTTGGACGTGGCAGAACCTTACATATTCTGTGAGCTTCGATGAGCCAGAGTGATATCATAACCACCAGAAAT CCCATTAAATTTTGTTAGAAAAATTACCACATTAAATATATGAGTTAAGTAGATTGGATTTGCTGAAATTGGTGT TGGGCATATTAGCAAAATATTCTTAATTTGTGGACTCGATTCTTTTTTACTACATATTTCCCAAGTTATCTTAAG ATGTCTGTAAATTTAACTTTTATTAAAGTTTTGTCAATCTTTGTGAATAGTGGTTGTGGAACAGTAGAAAACCAT ATGGGGACTATAGTGCAACCTATTTGGGTAAAGAAACCATTTGCTAAAATGGAGAAAGTAAATAGATTTTTATTT AAATTACAGAAACATGTTAAAGGCCGGACAAAGGAAAGACAATAAAATCATAAATTATC

PCT/US2003/028547

1348/6881 FIGURE 1255

PCT/US2003/028547

1349/6881 FIGURE 1256A

GAGGTCAGACCGGTTGCTTTCCCGGGAGTTCGGCGTTTGCTGGGGCTGCAGCAGCTGAAGTGTAGTGTTTTCTTG ACGGGTGTAGCGATCCGCGCTAGAGGAAGACGAGGCCCGGGAACGCATGTCCCCCAGGGCAGGTTAGGGGGCTGG AGGGGTCAAATCCCGGGGTACTTGTGGAGACTCTTTAGCGTGGCTTCTTCTCTCTGCTGAGACCCCGAGAGCTTT CCCAGTTCTCCTCCCAGGACCACCGGGGTTCCTGAAGATCGGGACTTTTCTGCGCCCCTCCACCAACAGCCCATC TCCTGTCTATGAAGAAAGACCCTTCGTAGAAACAACTTCCCCGCTGCTGACGCGTTTTCCCGTCCCGTCCCCGAA GTAGTCTACTATGACCTCGTTGTGAGCCTCTGAACGATTTTGACACTTTCCCGAGGCCTAGGGTATTATATCCTA ACCTTACTAAAGACCACAGAGGTGCTTGCCATT<u>ATG</u>GAAATCAGCTTGCTGGCATTGCTCCCTCCCAGATCCTT TCTGTAGAGAGTTATTTTCAGATATTCATGACTTTGAATATGATAAAAGCCTGGGGAGTACTCGGTTTTTTAAA GTTGCTCGAGCCAAGCACCGAGAAGGCCTGGTCGTTGTGAAGGTTTTTGCAATTCAGGATCCCACATTGCCTTTA ACCAGCTATAAACAAGAGCTGGAGGAACTGAAAATCAGGCTTAATTCTGCACAGAATTGTCTACCTTTCCAGAAA GCATCAGAAAAAGCATCTGAGAAAGCAGCTATGCTCTTTAGGCAGTATGTGCGAGACAATCTCTATGATCGCATC AGTACCCGTCCATTCTTGAATAACATTGAGAAGCGCTGGATTGCTTTCCAGATCCTGACAGCTGTGGACCAAGCA CACAAATCTGGAGTTCGTCATGGGGACATCAAGACTGAGAATGTGATGGTCACCAGTTGGAATTGGGTTCTTCTA ACTGATTTTGCCAGTTTTAAGCCCACTTATCTTCCAGAAGACAACCCGGCAGATTTCAATTATTTCTTTGACACA TCACGGAGGAGAACTTGCTATATTGCTCCTGAACGTTTTGTTGATGGTGGGATGTTTGCCACTGAGTTAGAATAT ATGAGAGATCCTTCAACTCCGCTTGTAGACTTAAATAGCAATCAGAGAACAAGAGGAGAGTTGAAGAGAGCAATG GACATCTTTTCAGCAGGTTGTGATAGCTGAGCTTTTTACAGAAGGTGTACCATTATTTGATCTCTCAACTT GTAACTCAGATGATTCACCGTGAGCCAGATAAACGTTTAGAGGCAGAAGATTACTTAAAACAGCAGCGTGGCAAT GATGAGCGTATTCTGGTTATACGGAAGGATTTGGGCAACATTATTCACAATCTCTGTGGACATGATCTGCCAGAA AAAGCCGAAGGAGGCCTAAGGAAAATGGGCTGGTTATCTTGGTATCTGTTATAACATCCTGCCTACAGACCCTT AAATACTGTGATTCCAAACTAGCTGCTTTGGAACTGATTCTTCATTTGGCTCCAAGATTAAGTGTTGAAATCCTT TTGGATCGTATTACTCCATATCTTTTGCATTTCAGCAATGACTCTGTTCCTAGGGTGAGGGCTGAAGCCTTGAGG . ACGTTGACCAAAGTTCTTGCTCTCGTCAAAGAGGTTCCTCGTAATGATATCAATATTTATCCGGAATACATTCTG CCAGGCATAGCCCACTTAGCCCAAGATGATGCTACTATCGTTAGACTAGCCTATGCTGAAAACATAGCTCTGCTG GCAGAAACAGCTCTGAGATTCTTGGAATTAGTACAGTTAAAAAAATCTTAATATGGAAAATGACCCCAATAATGAA GAAATAGATGAGGTTACACATCCAAATGGAAATTATGACACAGAGCTCCAAGCCTTACATGAAATGGTCCAGCAG TGTGTATTCTTTGGACGTCAGAAAGCCAACGATGTTTTGTTGTCCCACATGATTACTTTCCTAAATGATAAGAAT ATTCTCAAGCCTCTGCTGCAACAAGGTCTTAGTGATGCTGAGGAATTTGTCATTGTGAAAGCTCTTTATGCCCTT **ACTTGTATGTGCCAGTTAGGACTGCTACAAAAACCCCATGTTTACGAATTTGCCAGTGATATTGCCCCCTTCCTG** TGTCATCCCAATTTATGGATACGTTATGGTGCCGTGGGATTTATCACAGTGGTAGCTCGTCAAATAAGTACAGCT GTTCTGCTCAGTGTTTTAAAGGAACCAGTAAGTCGTTCTATATTTGATTATGCTTTGAGGTCTAAAGATATTACT AGCTTGTTCAGACATCTTCACATGCGTCAGAAGAAACGAAATGGTTCTCTTCCCGACTGCCCTCCGCCAGAGGAT CCTGCCATAGCACAGCTTCTGAAGAAGTTGCTCTCACAGGGAATGACAGAGGAAGAGAGAAGACTTCTGGCA CTGAAAGACTTCATGATGAAATCTAATAAAGCAAAGGCCAATATAGTGGACCAGAGCCATCTTCATGATAGTAGT CAGAAAGGTGTAATTGACTTGGCAGCTTTAGGCATAACTGGGAGACAAGTTGATCTTGTTAAAACCAAACAAGAA CCAGATGACAACGGGCCAGAAAACATGTAAAACAAGACTCAAATGTAAATGAAGAATGGAAAAGCATGTTTGGG TCACTGGACCCACCAAACATGCCACAGGCCCTACCTAAAGGGAGTGATCAGGAGGTGATTCAGACTGGGAAACCT CCTCGTTCCGAGTCCTCTGCTGGCATTTGTGTCCCTTTGTCAACTTCTTCACAGGTTCCAGAAGTGACAACTGTC CAAAATAAAAACCAGTAATACCGGTTTTAAGTAGTACAATCTTACCATCCACCTATCAGATTCGAATTACAACT TGTAAAACTGAACTTCAGCAACTCATCCAGCAAAAGCGGGAGCAGTGCAATGCTGAGAGAATAGCTAAGCAGATG ATGGAAAATGCTGAATGGGAGAGTAAACCACCACCACCTGGATGGCGTCCTAAAGGGCTGTTAGTTGCCCATCTT

PCT/US2003/028547

1350/6881 FIGURE 1256B

CGAATTGGAGGACGAGTCAAGACGCTCACATTCTGCCAAGGCTCCCACTATTTAGCCATAGCATCTGATAATGGT $\tt CTAGATCAGAAGGAGGACGGTTGTTGTTGTGGATATGCATCACTTCAACTCTGGAGCACAGTCTGTTCTTGCCTAT$ GCCACTGTGAATGGCTCTCTGGTTGGCTGGGACCTTAGGTCTTCAAGCAATGCGTGGACTTTAAAGCATGATTTA AAGTCGGGCCTCATCACTTCCTTTGCTGTGGACATCCACCAATGCTGGCTCTGCATTGGTACAAGCAGTGGTACC ATGGCTTGTTGGGACATGAGGTTCCAGTTGCCAATTTCAAGTCACTGTCATCCTTCCAGGGCTCGAATCAGACGC CTCTCAATGCACCCTCTGTATCAGTCCTGGGTGATTGCAGCTGTTCAGGGCAACAACGAAGTGTCCATGTGGGAC ATGGAGACTGGTGACAGAAGATTTACTCTCTGGGCCAGCAGTGCACCACCACTTTCTGAATTACAGCCTTCTCCT CATAGCGTCCATGGTATCTACTGTAGTCCTGCAGATGGAAATCCTATCCTACTAACAGCTGGCTCAGATATGAAA ATAAGGTTTTGGGACTTGGCTTACCCAGAAAGGTCCTATGTTGTTGCAGGAAGTACTAGTTCCCCATCTGTGTCC TACTACAGGAAAATAATTGAAGGCACTGAAGTTGTCCAGGAAATTCAGAATAAGCAGAAAGTAGGACCAAGTGAT GACACCCCTCGAAGGGGCCCAGAGTCCCTGCCCGTGGGACATCATGACATCATCACTGATGTCGCCACATTCCAG ACCACACAGGGCTTCATCGTAACTGCTTCTAGAGATGGGATTGTGAAGGTGTGGAAA<u>TAA</u>AACCTACTGATTTGT ATAAATTTTAATAGTTATAAATATAATACTATAACTCGAGAAAAGGCATTTCTAGAGAACAGATTCATTTGCTTA TATAGAGGTGAGAAATGTAAAATATGAAAATGAATATGTTTATTTTGTATTGAAAAAGATGGTTGAAAAGATGGT TGTAAGCTATTATAGTATAAACACATTTTTGCTATTAAAAATGCTATTCAAAGCAGTTAAACTGT

PCT/US2003/028547

FIGURE 1257

MGNQLAGIAPSQILSVESYFSDIHDFEYDKSLGSTRFFKVARAKHREGLVVVKVFAIQDPTLPLTSYKQELEELK IRLNSAQNCLPFOKASEKASEKAAMLFRQYVRDNLYDRISTRPFLNNIEKRWIAFQILTAVDQAHKSGVRHGDIK TENVMVTSWNWVLLTDFASFKPTYLPEDNPADFNYFFDTSRRRTCYIAPERFVDGGMFATELEYMRDPSTPLVDL NSNORTRGELKRAMDIFSAGCVIAELFTEGVPLFDLSOLLAYRNGHFFPEOVLNKIEDHSIRELVTQMIHREPDK RLEAEDYLKQQRGNAFPEIFYTFLQPYMAQFAKETFLSADERILVIRKDLGNIIHNLCGHDLPEKAEGEPKENGL VILVSVITSCLOTLKYCDSKLAALELILHLAPRLSVEILLDRITPYLLHFSNDSVPRVRAEALRTLTKVLALVKE. VPRNDINIYPEYILPGIAHLAQDDATIVRLAYAENIALLAETALRFLELVQLKNLNMENDPNNEEIDEVTHPNGN YDTELQALHEMVQQKVVTLLSDPENIVKQTLMENGITRLCVFFGRQKANDVLLSHMITFLNDKNDWHLRGAFFDS IVGVAAYVGWQSSSILKPLLQQGLSDAEEFVIVKALYALTCMCQLGLLQKPHVYEFASDIAPFLCHPNLWIRYGA VGFITVVAROISTADVYCKLMPYLDPYITOPIIOIERKLVLLSVLKEPVSRSIFDYALRSKDITSLFRHLHMROK KRNGSLPDCPPPEDPAIAQLLKKLLSQGMTEEEEDKLLALKDFMMKSNKAKANIVDQSHLHDSSQKGVIDLAALG ITGROVDLVKTKQEPDDKRARKHVKQDSNVNEEWKSMFGSLDPPNMPQALPKGSDQEVIQTGKPPRSESSAGICV PLSTSSQVPEVTTVQNKKPVIPVLSSTILPSTYQIRITTCKTELQQLIQQKREQCNAERIAKQMMENAEWESKPP PPGWRPKGLLVAHLHEHKSAVNRIRVSDEHSLFATCSNDGTVKIWNSQKMEGKTTTTRSILTYSRIGGRVKTLTF CQGSHYLAIASDNGAVQLLGIEASKLPKSPKIHPLQSRILDQKEDGCVVDMHHFNSGAQSVLAYATVNGSLVGWD LRSSSNAWTLKHDLKSGLITSFAVDIHQCWLCIGTSSGTMACWDMRFQLPISSHCHPSRARIRRLSMHPLYQSWV IAAVQGNNEVSMWDMETGDRRFTLWASSAPPLSELQPSPHSVHGIYCSPADGNPILLTAGSDMKIRFWDLAYPER SYVVAGSTSSPSVSYYRKIIEGTEVVQEIQNKQKVGPSDDTPRRGPESLPVGHHDIITDVATFQTTQGFIVTASR DGIVKVWK

PCT/US2003/028547

FIGURE 1258A

GGCCCTGCCTTCTCCATCAGACACCTGGGAATCACAGCTGGGGCCCCTGCTTTGGCCGTTTGTCCTGCTGGAATC AGGGGCTGAAGGAACTGCCTGAGGATGACAAAGAAGGGGGATCCATGAACAAGGAGGTGCTAACAGGTTTCCTGCT GATCTTGGCACTGACCGAAGCGCTGGCATTTGCCATCCAGGAACCATCTCCCAGGGAATCTCTTCAGGTCCTCCC TTCAGGCACTCCCCGGGAACCATGGTGACAGCACCCCACAGCTCTACCAGACATACTTCTGTGGTGATGCTGAC CCCCAATCCCGATGGACCCCCTCACAGGCTGCAGCTCCCATGGCAACACCGACACCCGTGCAGAGGGGCACCC TCCTACGCACACCATCTCCACCATCGCTGCGACAGTAACCGCCCCCATTCTGAAAGCTCCCTGTCCACAGGGCC CGCTCCAGCAGCCATGGCAACCACATCCTCCAAGCCAGAGGGCCGCCCTCGAGGGCAGGCTGCCCCCACCATCCT GCTGACAAAGCCACCGGGGGCCACCAGCCGCCCCACCAGCGCGCCCCCGCACTACCACACGCAGGCCCCCCAG GCCCCAGGCTCTTCCCGAAAAGGGGCTGGTAATTCATCACGCCCTGTCCCGCCTGCACCTGGTGGCCACTCCAG GAGTAAAGAAGGACAGCGAGGACGAAATCCAAGCTCCACACCTCTGGGGCAGAAGCGGCCCCTGGGGAAAATCTT TCAGATCTACAAGGGCAACTTCACAGGGTCTGTGGAACCGGAGCCCTCTACCCTCACCCCCAGGACCCCACTCTG GGGCTACTCCTCTCACCACAGCCCCAGACAGTGGCTGCGACCACAGTGCCCAGCAATACCTCATGGGCACCCAC CACCACCTCCCTGGGGCCTGCAAAGGACAAGCCAGGCCTTCGCAGAGCAGCCCAGGGGGGGTGGTTCTACCTTCAC CAGCCAAGGAGGACACCAGATGCCACAGCAGCCTCAGGTGCCCCTGTCAGTCCACAAGCTGCCCAGTGCCTTC TCAGCGCCCCACCACGGTGACCCACAGGATGGCCCCAGCCATAGTGACTCTTGGCTTACTGTTACCCCTGGCAC CAGCAGACCTCTGTCTACCAGCTCTGGGGTCTTCACGGCTGCCACGGGGCCCACCCCAGCTGCCTTCGATACCAG TGTCTCAGCCCCTTCCCAGGGGATTCCTCAGGGAGCATCCACAACCCCACAAGCTCCAACCCATCCCTCCAGGGT TCTCTCCACAGTGGTATCCACAGCCACAGGCAATTTCCTCAACCGCCTGGTCCCCGCCGGGACCTGGAAGCCTGG GACAGCAGGGAACATCTCCCATGTGGCCGAGGGGGACAAACCGCAGCACAGAGCCACCATCTGCCTGAGCAAGAT GGATATCGCCTGGGTGATCCTGGCCATCAGCGTGCCCATCTCCTCCTGCTCTGTCCTGCTGACGGTGTGCTGCAT GAAGAGGAAGAAGAAGACCGCCAACCCGGAGAACAACCTGAGCTACTGGAACAACACCATCACCATGGACTACTT CAACAGGCATGCTGTGGAGCTGCCCAGGGAGATCCAGTCCCTTGAAACCTCTGAGGACCAGCTCTCAGAGCCCCG CTCCCCAGCCAATGGCGACTATAGAGACACTGGGATGGTCCTTGTTAACCCCTTCTGTCAAGAAACACTGTTTGT GGGAAACGATCAAGTATCTGAGATCTAACTACAGCAGGCATCACTTTGCCATTCCGTATTTTTCGTCTCTAAATT ATAAATATACAAATACATATATTATAAATATAACCTTTGTGTAACCCTGACTTAATGAGAAACATTTTCAGCTTT TGGGGATCCCAGGAACCCTGGTCAGGTGAGGTAAGAGACTGACCTCCTGTAGAAGCTGAATGTTACAGTGCAAGC GCACGATTCTTTGAGTGATTCTTAAAGCTCTGGTTCCTCTTGATTTGGTGTGACCCCATTTCCTCCCTTCTCATA CGCACACCTGTAAAGGGAACTGGACCGCCTCAGGGGAAGACGGCAGACTCATGCACAGAGAAAGGAAAAGGGAACA GTTGTGGATGCAGGCAGGAGCATGGAGCCCTCAGGAATCCATGGAGGACATCAAGGCATCCCAAGGCCATATTC CCCTAACATTACTTCCACTGCTAACAACAGGACTGCCTTTCCCTGGTGGGAAAATGCTCCCTTTATGCCCATTCU TGTATCCCCTCCAACACCCACATCTGCATTAAACACCCGTGCCTTTCTCTTGGAGAGGGTTTAGATGCAGATCCC GGCCCTGGAGCTTTAAAATGCTTGCCCTTCCTTCTTCAAGGATCAAATGTTTATTGGGGTTCAGCTTTGTTTTCT CAAAAGGCCATGGTATCGTGCCCCTGAGGAACATGTTTATCTAAGAAGCTTTGAGGTAGTAGAGCGATAATTTTT ATACTCCTACTTGGCACTGCAAACCTGCTCGCAGCACCAGCCGGTGGACTTGCCATCCAGCTCTCAGCTTCCACT GCTCCCCTTGTTCCCGGCCGGCTGCCTGCCTCCCCGTGCTGTCCAGCACGGCCAACAACGTCAGACCCTCAGA TTGACACTTCCTTTCTCTAAAAGAAAAATAGTTTGATAGTATATTTTGAATATAGATGCTCTTATAGTCAGATTG TTCCTTAAAAAAAAAAAAAAAGTGGCCTTCAAAAGTGTGTTCTCAATGTTGTATGAACCTCCTTCACATGAGTTC GGTTGTTGTCTCTCAAAGACTCTTCAACCCACAAAGAAGCAACTAAATGTTTCTCTAAGTTTAATTTTCTAG CGTGTTGTTGTCTTACCTTTTTAACCTTACCATAATATTTCTGTTAACTGTTACATTTAATATACCAATGTGTGT

PCT/US2003/028547

1353/6881 FIGURE 1258B

PCT/US2003/028547

1354/6881 FIGURE 1259

MKRSLQALYCQLLSFLLILALTEALAFAIQEPSPRESLQVLPSGTPPGTMVTAPHSSTRHTSVVMLTPNPDGPPS QAAAPMATPTPRAEGHPPTHTISTIAATVTAPHSESSLSTGPAPAAMATTSSKPEGRPRGQAAPTILLTKPPGAT SRPTTAPPRTTTRRPPRPPGSSRKGAGNSSRPVPPAPGGHSRSKEGQRGRNPSSTPLGQKRPLGKIFQIYKGNFT GSVEPEPSTLTPRTPLWGYSSSPQPQTVAATTVPSNTSWAPTTTSLGPAKDKPGLRRAAQGGGSTFTSQGGTPDA TAASGAPVSPQAAPVPSQRPHHGDPQDGPSHSDSWLTVTPGTSRPLSTSSGVFTAATGPTPAAFDTSVSAPSQGI PQGASTTPQAPTHPSRVSESTISGAKEETVATLTMTDRVPSPLSTVVSTATGNFLNRLVPAGTWKPGTAGNISHV AEGDKPQHRATICLSKMDIAWVILAISVPISSCSVLLTVCCMKRKKKTANPENNLSYWNNTITMDYFNRHAVELP REIQSLETSEDQLSEPRSPANGDYRDTGMVLVNPFCQETLFVGNDQVSEI

PCT/US2003/028547

1355/6881 FIGURE 1260

ATGGCGGCGCATTACGGGTGGCGGCGGTCGGGGCAAGGCTCAGCGTTCTGGCGAGCGGTCTCCGCGCCGCGCTC CGCAGCCTTTGCAGCCAGGCCACCTCTGTTAACGAACGCATCGAAAACAAGCGCCGGACCGCGCTGCTGGGAGGG GGCCAACGCCGTATTGACGCGCAGCACAAGCGAGGAAAGCTAACAGCCAGGGAGAGGATCAGTCTCTTGCTGGAC ${\tt CCTGGCAGCTTTGTTGAGAGCGACATGTTTGTGGAACACAGATGTGCAGATTTTGGAATGGCTGCTGACAAGAAT}$ TTTACAGTTTTTGGAGGCAGTCTGTCAGGAGCACATGCCCAAAAGATCTGCAAAATCATGGACCAGGCCATAACG TATGCAGACATCTTTCTGAGGAATGTTACGGCATCCGGAGTCATCCCTCAGATTTCTCTGATCATGGGCCCATGT GCTGGTGGGGCCGTCTACTCCCCAGCCCTAACAGACTTCACGTTCATGGTAAAGGACACCTCCTACCTGTTCATC ACTGGCCCTGATGTTGTGAAGTCTGTCACCAATGAGGATGTTACCCAGGAGGAGCTCGGTGGTGCCAAGACCCAC ACCACCATGTCAGGTGTGGCCCACAGAGCTTTTGAAAATGATGTTGATGCCTTGTGTAATCTCCGGGATTTCTTC GAGCTTGACACAATTGTCCCTTTGGAATCAACCAAAGCCTACAACATGGTGGACATCATACACTCTGTTGAT ACTGTTGGAATTGTTGGCAACCAACCTAAGGTGGCCTCAGGATGCTTGGATATTAATTCATCTGTGAAAGGGGCT CGTTTTGTCAGATTCTGTGATGCATTCAATATTCCACTCATCACTTTTGTTGATGTCCCTGGCTTTCTACCTGGC ACAGCACAGGAATACGGGGGCATCATCCGGCATGGTGCCAAGCTTCTCTACGCATTTGCTGAGGCAACTGTACCC AAAGTCACAGTCATCACCAGGAAGGCCTATGGAGGTGCCTATGATGTCATGAGCTCTAAGCACCTTTGTGGTGAT ACCAACTATGCCTGGCCCACCGCAGAGATTGCAGTCATGGGAGCAAAGGGCGCTGTGGAGATCATCTTCAAAGGG CATGAGAATGTGGAAGCTGCTCAGGCAGAGTACATCGAGAAGTTTGCCAACCCTTTCCCTGCAGCAGTGCGAGGG TTTGTGGATGACATCATCCAACCTTCTTCCACACGTGCCCGAATCTGCTGTGACCTGGATGTCTTGGCCAGCAAG AAGGTACAACGTCCTTGGAGAAAACATGCAAATATTCCATTG**TAA**

PCT/US2003/028547

1356/6881 FIGURE 1261

MAAALRVAAVGARLSVLASGLRAAVRSLCSQATSVNERIENKRRTALLGGGQRRIDAQHKRGKLTARERISLLLD PGSFVESDMFVEHRCADFGMAADKNKFPGDSVVTGRGRINGRLVYVFSQDFTVFGGSLSGAHAQKICKIMDQAIT VGAPVIGLNDSGGARIQEGVESLAGYADIFLRNVTASGVIPQISLIMGPCAGGAVYSPALTDFTFMVKDTSYLFI TGPDVVKSVTNEDVTQEELGGAKTHTTMSGVAHRAFENDVDALCNLRDFFNYLPLSSQDPASVRECHDPSDRLVP ELDTIVPLESTKAYNMVDIIHSVVDEREFFEIMPNYAKNIIVGFARMNGRTVGIVGNQPKVASGCLDINSSVKGA RFVRFCDAFNIPLITFVDVPGFLPGTAQEYGGIIRHGAKLLYAFAEATVPKVTVITRKAYGGAYDVMSSKHLCGD TNYAWPTAEIAVMGAKGAVEIIFKGHENVEAAQAEYIEKFANPFPAAVRGFVDDIIQPSSTRARICCDLDVLASK KVQRPWRKHANIPL

PCT/US2003/028547

1357/6881 FIGURE 1262

TCCTATGATCACGTGGAACTCACATTCAATGACATGAAGAACGTGCCAGAAGCCTTCAAAGGGACCAAGAAAGGC ACTGTCTACCCTTACCGGGTCATCTTTCTGTCCAAGGGCAAGGATGCCATGCAGTCCTTCATGATGCCA TTTTATCTCATGAAAGACTGTGAGATCAAGCAGCCCGTATTTGGTGCAAACTACATCAAGGGAACAGTGAAGGCG GAAGCGGGAGGTGGCTGGGAAGGCTCTGCTTCCTACAAGTTGACTTTCACGGCAGGGGGCGCCATTGAGTTCGGA CAGCGGATGCTCCAGGTGGCATCTCAAGCCTCCAGAGGTGAAGTCCCCAGTGGAGCCTATGGCTACTCTTACATG CCCAGCGGGGCCTATGTCTATCCCCCGCCAGTCGCCAATGGAATGTACCCCTGCCCTCCTGGCTACCCCTATCCA CCGCCCCACCTGAGTTCTATCCAGGACCCCCATGATGGACGGGGCCATGGGATACGTGCAGCCCCCACCACCG CCCTACCCTGGGCCCATGGAACCTCCGGTCAGCGGCCCCGATGTCCCTCCACTCCTGCAGCCGAAGCCAAGGCC CCACCTCCCTACCACCGGAAGATAAGAAGACCCAGTAGGCCCTCCTGCCTCCCTGCCTCCACCCTCATCT CTGATCATAAACAATTACCAGGAACTAGCATTGTGGGACATTAGGGCCCCCGGCCTCGGGAGAGGTGCCGCCCAG GGAGCATCCCCTGTTCCTGTTTCACTCTCAGCTTCTCCCCTCGAAGGGACTCTCTGGCCACCTCCTCCACCGCAG GGGCCCTGCCAGACCCTGCTCACATTCCCTCTGCTGGTCTGTGCTGGTCTCAGAAGGCCACCGCGCCCGCATTCC TGTGTGACTTTTGAAGCTGTAAAATGAGCTTCCAGGGCTTGGGTGGCGTCGGGGCAGGGCCGCCGAGGCTGGGAG CCTGTGTGCTGGCCGGGACCTGCCACCAGCCCCCAGCCTGCTTCCTCCCTTAAGCTTTGTGCCCCTGGATGCG CTAACATTCACTCTTGTTTTGTCCCTGGACTGGCCATGAAGTGAGGAGATGGTTATTTAAAGAGAATTCCCTATTT ATTTGACAAAAATCCAGTTAATATTTAATGTGAAATAAACCCTGTTTGCCCCTCG

PCT/US2003/028547

1358/6881 FIGURE 1263

AGGACCTGGAGGACCTGTACAGCCGCTACAAGAAGCTGCAGCAAGAGCTGGAGTTCCTGGAGGTGCAGGAGGAAT ACATCAAAGATGAGCAAAAGAACCTGAAAAAGGAATTTCTCCATGCCCAGGAGGAGGTGAAGCGAATCCAAAGCA TCCCGCTGGTCATCGGACAATTTCTGGAGGCTGTGGATCAGAATACAGCCATCGTGGGCTCTACCACAGGCTCCA ACTATTATGTGCGCATCCTGAGCACCATCGATCGGGAGCTGCTCAAGCCCAACGCCTCAGTGGCCCTCCACAAGC ACAGCAATGCACTGGTGGACGTGCTGCCCCCGAAGCCGACAGCAGCATCATGATGCTCACCTCAGACCAGAAGC CAGATGTGATGTACGCGGACATCGGAGGCATGGACATCCAGAAGCAGGAGGTGCGGGAGGCCGTGGAGCTCCCGC TCACGCATTTCGAGCTCTACAAGCAGATCGGCATCGATCCCCCCGAGGCGTCCTCATGTATGGCCCACCTGGCT GTGGGAAGACCATGTTGGCAAAGGCGGTGGCACATCACAACAGCTGCATTCATCCGGGTCGTGGGCTCGGAGT TTGTACAGAAGTATCTGGGTGAGGGCCCCCGCATGGTCCGGGATGTTCCCGCCTGGCCAAGGAGAATGCACCTG CCATCATCTTCATAGACGAGATTGATGCCATCGCCACCAAGAGATTCGATGCTCAGACAGGGGCCGACAGGGAGG CCACAAACAGAGCAGACCCCTGGATCCGGCCCTGCTACGGCCAGGACGGCTGGACCGTAAAATTGAATTTCCAC TTCCTGACCGCCGCCAGAAGAGTTGATTTTCTCCACTATCACTAGCAAGATGAACCTCTCTGAGGAGGTTGACT TGGAAGACTATGTGGCCCGGCCAGATAAGATTTCAGGAGCTGATATTAACTCCATCTGTCAGGAGAGTGGAATGT TGGCTGTCCGTGAAAACCGCTACATTGTCCTGGCCAAGGACTTCGAGAAAGCATACAAGACTGTCATCAAGAAGG **ATAAGATCGAATCC**

PCT/US2003/028547

1359/6881 FIGURE 1264

CTGGAAGAATTCGCGGCCGAAGTGGCTGGCTCATTTAAGATGAGGCTTCTGCTGCTTCTCCTAGTGGCGGCGTCT GCGATGGTCCGGAGCGAGGCCTCGGCCAATCTGGGCGGCGTGCCCAGCAAGAGATTAAAGATGCAGTACGCCACG GGGCCGCTGCTCAAGTTCCAGATTTGTGTTTCCTGAGGTTATAGGCGGGTGTTTGAGGAGTACATGCGGGTTATT CAAGCTCCTAGCATCTGGCAGTGGGGCCAAGAAATAAGGTTTATGCATGTATGATGGTTTTCTTCTTGAGCAAC ATGATTGAGAACCAGTGTATGTCAACAGGTGCATTTGAGATAACTTTAAATGATGTACCTGTGTGGTCTAAGCTG GAATCTGGTCACCTTCCATCCATGCAACAACTTGTTCAAATTCTTGACAATGAAATGAAGCTCAATGTGCATATG GATTCAATCCCACACCATCGATCATAGCACCACCTATCAGCACTGAAAACTCTTTTGCATTAAGGGATCATTGCA AGAGCAGCGTGACTGACATTATGAAGGCCTGTACTGAAGACAGCAAGCTGTTAGTACAGACCAGATGCTTTCTTG GCAGGCTCGTTGTACCTCTTGGAAAACCTCAATGCAAGATAGTGTTTCAGTGCTGGCATATTTTTGGAATTCTGCA CAATTTGATTTTTTTCCAAAGATGTCTGTTAAATCTGTTGTGCTTTTATATGAATATTTGTTTTTTATAGTTTA AAATTGATCCTTTGGGAATCCAGTTGAAGTTCCCAAATACTTTATAAGAGTTTATCAGACATCTCTAATTTGGCC ATGTCCAGTTTATACAGTTTACAAAATATAGCAGATGCAAGATTATGGGGGGAAATCCTATATTCAGAGTACTCTA TAAATTTTTGTGTATGTGTGTGTGTGTGTGTGATTACCAGAGAACTACTAAAAAAACCAACTGCTTTTTAAATCC TATTGTGTAGTTAAAGTGTCATGCCTTGACCAATCTAATGAATTGATTAACTGAGCCTTTATACTTAACTA AATAAAAAACTAAGCAGATATGA

PCT/US2003/028547

FIGURE 1265

PCT/US2003/028547

1361/6881 FIGURE 1266

PCT/US2003/028547

FIGURE 1267

CAATTAAGTTGCAGAGTTCTGATGGAGAGATATTTGAAGTTGATGTGGAAATTGCCAAACAATCTGTGACTATTA CAATATTAAAAAAGGTCATTCAGTGGTGCACCCACCACAAGGATGACCCTCCTCCTCCTGAAGATGATGAGAACA AAGAAAAGCGAACAGATGATATCCCTGTTTGGGACCAAGAATTCCTGAAAGTTGACCAAGGAACACTTTTTGAAC TCATTCTGGCTGCAAACTACTTAGACATCAAAGGTTTGCTTGATGTTACATGCAAGACTGTTGCCAATATGATCA AGGGGAAAACTCCTGAGGAGATTCGCAAGACCTTCAATATCAAAAATGACTTTCCCTCTTTTTTTGTAAAGCAATG AAGTTTTCTGGAATAGAATTAACAAAATATTATCTTTATTCATGAGTTGGAAACTGGAAAAAGGCTTCTTGAAGT AAATGTTCTGAGTGGAGCTACTAGGATGTCTTCCAGCCTCCTGCAGTCAAGGAGTACCACTGTATTGATTAGCCT AATATATTGCCTAGAGACTCAGTTACTACCCAGTTTGTGGTTTTTTGGGAGAAATGTAACTGGACAGTTAGCTTT TCAATTAAAAAGACACTTAACCCATGTGGGATGTCATCTTTTTATAATTAGTGTTCCCATGTGGAGAAAATTATT TCTCTTCACTTAAATGGGTTGAATGTGTATATATTTGTTCAGCTTGAAAAGACTTAGTTTATATCCTAGCTCACT GGAGGCTGCTGACATAACCATAACTTCTGTCCCTTCTAATTGTCATTTATATGCCTAACTGGAGCTAGTACTTTA GAGATGGCTCACAAATTTTGATTTTTTTTTTCTTCCTTGTGCTCCCTTTTTTTCTCCTTGCTTTTCCAGTTAACAT CTATATTCACATGTAATCTTGTTTTCTCTTCACATTCACTGAGTTGTTCAGGCTCAGATCATCCCTTGACAGTAG TTTGCCTTCATCTCACCTTTCATTTGTCCCAAATTCACCTTATTTAATAAAGTCCCATATGTTGTCTCACCTTAA

WO 2004/030615 PCT/US2003/028547

1363/6881 FIGURE 1268

CAATTAAGTTGCAGAGTTCTGATGGAGAGATATTTGAAGTTGATGTGGAAATTGCCAAACAATCTGTGACTATTA CAATATTAAAAAAGGTCATTCAGTGGTGCACCCACCACAAGGATGACCCTCCTCCTCCTGAAGATGATGAGAACA AAGAAAAGCGAACAGATGATATCCCTGTTTGGGACCAAGAATTCCTGAAAGTTGACCAAGGAACACTTTTTGAAC TCATTCTGGCTGCAAACTACTTAGACATCAAAGGTTTGCTTGATGTTACATGCAAGACTGTTGCCAATATGATCA AGGGGAAAACTCCTGAGGAGATTCGCAAGACCTTCAATATCAAAAATGACTTTACTGAAGAGGAGGAAGCCCAGG TACGCAAAGAGAACCAGTGGTGTGAAGAGAAGTGAAATGTTGTGCCTGACACTGTAACACTGTAAGGATTGTTCC AAATACTAGTTGCACTGCTCTGTTTATAATTGTTAATATTAGACAAACAGTAGACAAATGCAGCAAGTCAAT TGTATTAGCAGAATATTGTCCTCATTGCATGTGTAGTTTGAGCACAGATCCCAAACCTTACGGCCAAGTTTCTTC TAGTATGATGGAAAGTTTCTTTTCTTTGCTCTGAATAAAACTGAACTGTGGGTTCTCTATAAGTGGCATTTTG GGCTTTCCCTCTTTTTTGTAAAGCAATGTCTGCCTAGTTTATTGTCCAGTTAACTTTAGTGACCTTTTAAAAGTT GGCATTGTAAATAAAACAACTTGCAAAAAAGTTTTCTGGAATAGAATTAACAAAATATTATCTTTATTCATGAGT TGGAAACTGGAAAAAGGCTTCTTGAAGTAAATGTTCTGAGTGGAGCTACTAGGATGTCTTCCAGCCTCCTGCAGT CAAGGAGTACCACTGTATTGATTAGCCTGTATGTAGCAGGGCTCCCTTCATTGCATCTGAGGACTTGTTTTCTTT TTCTTTATTTTTAATCCTCTTAGTTTTAAATATATTGCCTAGAGACTCAGTTACTACCCAGTTTGTGGTTTTTTG GGAGAAATGTAACTGGACAGTTAGCTTTTCAATTAAAAAGACACTTAACCCATGTGGGATGTCATCTTTTTATAA TTAGTGTTCCCATGTGGAGAAAATTATTCACACTACTTGCATGTAAAGAATAATTTAACTTTAACATTAAAATA

PCT/US2003/028547

1364/6881 FIGURE 1269

MPSIQLQSFDGEIFAVDVEIAKQSVTIKTTLEDLGMDDEGDDPVPLPNVNAAVLKKVIQWCTHHKDDPPPEDDE NKEKQTDDIPVWDQEFLKVAQGTLFELIRAANYLDIKGLLDVTCKTVANMIKGKTPEEIRKTFNIKNDFTEEEEA QVRKENQWCEEK

PCT/US2003/028547

1365/6881 FIGURE 1270

GGTGGGTTTATCTCAAGGCCTGAGTAGCCGGTAACAAACGAGGGTTCCCGGGATTGGACCGACGCACCATGCCTC TGCGACTTGATATCAAAAGAAAGCTAACTGCTAGATCTGATCGAGTTAAGAGTGTGGATCTGCATCCTACAGAGC CATGGATGTTGGCAAGTCTTTACAATGGCAGTGTGTGTTTTGGAATCATGAAACACAGACACTGGTGAAGACAT TTGAAGTATGTGATCTTCCTGTTCGAGCTGCAAAGTTTGTTGCAAGGAAGAATTGGGTTGTGACAGGAGCGGATG ACATGCAGATTAGAGTGTTCAATTACAATACTCTGGAGAGAGTTCATATGTTTGAAGCACACTCAGACTACATTC GCTGTATTGCTGTTCATCCAACCCAGCCTTTCATTCTAACTAGCAGTGATGACATGCTTATTAAGCTCTGGGACT GGGATAAAAAATGGTCTTGCTCACAAGTGTTTGAAGGACACCCCATTATGTTATGCAGATTGTGATCAACCCCA AAGATAACAATCAGTTTGCCAGTGCCTCTTTGGACAGGACTATCAAGGTGTGGCAGTTGGGCTCTTCGTCACCAA ACTTCACTTTGGAAGGACATGAGAAAGGCGTGAATTGCATTGATTACTACAGTGGTGGGGACAAGCCATACCTCA TTTCAGGTGCAGATGACCGTCTTGTTAAAATATGGGATTATCAGAATAAAACATGTGTGCAGACACTGGAAGGAC ATGCCCAAAATGTGTCTTGTGCCAGCTTTCATCCTGAGTTGCCAATCATTATCACAGGTTCAGAAGATGGAACAG TACGTATTTGGCATTCAAGCACCTACCGGCTTGAGAGCACACTGAATTATGGAATGGAGAGGGTATGGTGCGTGG CCAGTCTAAGAGGGTCAAACAATGTCGCTTTGGGCTATGATGAAGGGAGCATCATTGTTAAGCTTGGTCGGGAGG AACCTGCCATGTCCATGGATGCCAATGGAAAGATAATTTGGGCCAAGCATTCAGAAGTCCAGCAGGCCAACCTAA AAGCAATGGGAGATGCTGAAATTAAAGATGGTGAAAGATTGCCACTGGCAGTAAAGGATATGGGCAGTTGTGAAA ACACAGCAATGGCATTGAGAAACAAGAGCTTTGGATCTGCTCAGGAGTTTGCATGGGCCCACGATTCTTCAGAGT TTGGAGCAGAAAGTATCTACGGCGGCTTCTTATTGGGAGTCAGATCTGTAAATGGCTTAGCCTTCTATGACTGGG ACAATACAGAACTCATACGAAGAATTGAAATTCAGCCCAAACATATTTTCTGGTCTGACTCTGGAGAGCTAGTCT GTATTGCTACTGAGGAATCATTTTTTATCCTTAAGTATCTGTCAGAAAAAGTCTTGGCTGCACAGGAAACACATG AGGGAGTTACTGAAGATGCCATTGAAGATGCCTTTGAGGTTCTTGGTGAGATTCAGGAAATTGTGAAAACAGGGC TTTGGGTAGGCGATTGCTTCATTTACACAAGTTCTGTGAACAGATTAAATTATTATGTTGGAGGAGAAATAGTCA CCATTGCCCACTTGGACAGGACGATGTATCTCCTAGGCTACATTCCTAAAGACAACAGGCTTTATCTGGGGGATA AAGAATTGAACATCATTAGCTATTCCCTGCTGGTTTCAGTCCTGGAATACCAGACAGCTGTCATGCGGAGGGACT TTAGCATGGCTGATAAGGTCCTTCCTACCATTCCAAAAGAACAGAGGACCAGAGTTGCACACTTTTTGGAAAAGC AGGGCTTCAAGCAGCACCTTTACAGTATCCACAGATCCTGAGCATCGTTTTGAGCTTGCTCTTCAGCTTGGAG AGTTAAAAATTGCATACCAGTTAGCAGTGGAAGCAGAGTCAGAACAGAAGTGGAAACAACTTGCTGAACTTGCCA TTAGTAAATGTCAGTTTGGCCTAGCCCAGGAGTGCCTGCATCATGCACAGGATTATGGGGGCCTGCTGCTTTTGG CAAAAGTCAATCAGAAAGCAGCAGAATCCCTTGCTGACCCAACAGAGTATGAAAACCTGTTCCCTGGATTAAAAG CGCCAAATGAAGAGAGAAATGTCATGGAAGAGGGAAAAGACTTTCAGCCCTCAAGATCTACAGCTCAACAGGAAC TTGATGGGAAACCTGCTTCTCCTACTCCGGTTATTGTGGCCTCCCACACACCCAACAAAGAAGAAAAAAGAGTTTAC TCGAACTAGAAGTAGATTTGGATAATTTGGAATTAGAAGATATTGACACAACAGATATCAATCTGGATGAAGATA ACCCTGACCACAGTGCTTTGGACTATGAGAAACTTCTTAGATTTTTATATGTAAATGCTGTGGACCACTGGGAGC ACAATGCCCACATCATCTTAAGAAGAGTTTATGTGCAGCATTTAAATCACTGTGTTTTCCTTGTTAACTAAAACA

PCT/US2003/028547

1366/6881 FIGURE 1271

MPLRLDIKRKLTARSDRVKSVDLHPTEPWMLASLYNGSVCVWNHETQTLVKTFEVCDLPVRAAKFVARKNWVVTG
ADDMQIRVFNYNTLERVHMFEAHSDYIRCIAVHPTQPFILTSSDDMLIKLWDWDKKWSCSQVFEGHTHYVMQIVI
NPKDNNQFASASLDRTIKVWQLGSSSPNFTLEGHEKGVNCIDYYSGGDKPYLISGADDRLVKIWDYQNKTCVQTL
EGHAQNVSCASFHPELPIIITGSEDGTVRIWHSSTYRLESTLNYGMERVWCVASLRGSNNVALGYDEGSIIVKLG
REEPAMSMDANGKIIWAKHSEVQQANLKAMGDAEIKDGERLPLAVKDMGSCEIYPQTIQHNPNGRFVVVCGDGEY
IIYTAMALRNKSFGSAQEFAWAHDSSEYAIRESNSIVKIFKNFKEKKSFKPDFGAESIYGGFLLGVRSVNGLAFY
DWDNTELIRRIEIQPKHIFWSDSGELVCIATEESFFILKYLSEKVLAAQETHEGVTEDGIEDAFEVLGEIQEIVK
TGLWVGDCFIYTSSVNRLNYYVGGEIVTIAHLDRTMYLLGYIPKDNRLYLGDKELNIISYSLLVSVLEYQTAVMR
RDFSMADKVLPTIPKEQRTRVAHFLEKQGFKQQALTVSTDPEHRFELALQLGELKIAYQLAVEAESEQKWKQLAE
LAISKCQFGLAQECLHHAQDYGGLLLLATASGNANMVNKLAEGAERDGKNNVAFMSYFLQGKVDACLELLIRTGR
LPEAAFLARTYLPSQVSRVVKLWRENLSKVNQKAAESLADPTEYENLFPGLKEAFVVEEWVKETHADLWPAKQYP
LVTPNEERNVMEEGKDFQPSRSTAQQELDGKPASPTPVIVASHTANKEEKSLLELEVDLDNLELEDIDTTDINLD

PCT/US2003/028547

1367/6881 FIGURE 1272

PCT/US2003/028547

1368/6881 FIGURE 1273

 ${\tt MQRYNFHYLKYIVHFYRTCDYSRMIRMVLAYGELLLLTVSAEILFQWTNIVAWQQMPTFCGIAANLQETLVGFSFCFLCFFPLLLNQQGWKEGREVMNYSFQ}$

PCT/US2003/028547

1369/6881 FIGURE 1274

AAAGCTCGCGGGGGAAGCGGGGCTGTAGCTGGGCAGGAGAGGGGGGACGAAATCGGTAGCGATCTCGGCTGC GGACCCGGCCGCCTAAGCGCGGCGCCCACAGAAGCGGCGCCCCGAAGACGCGCTCCTGGCTCGGCCCGAC ${\tt AGCCTCGCTTGGCCGCCAGTTCTTCTGCAGCCGAAGGCGGTTGTTCTTTTAAAGAATTATTGAAGACGAAGGTTT}$ TTTTCTTTTTTTTTTTTTTAATGGCTTTACAGAATCTTAAATAGAATACAGTTTGACATGACGGCAAAAAATGTTG GTTTGACTTCCACAAATGCAGAAGTAAGAGGATTTATAGATCAGAATCTCAGTCCAACAAAAGGCAACATTTCAT TTGTTGCATTTCCAGTTTCCAATACCAACTCACCTACAAAGATTTTACCAAAAACCTTAGGACCAATAAATGTGA ATGTTGGACCCCAAATGATTATAAGCACACCACAGAGACTAACCAGTTCAGGAAGTGTTCTGATTGGGAGTCCAT GGGCTAGAAAATTTATAGACTCTGATTTTTCAGAAAGTAAACGAAGCAAAAAAAGGAGATAAAAATGGGAAAGGCT TGAGACACTTTTCAATGAAAGTGTGTGAGAAAGTTCAACGAAAAGGTACAACATCGTACAATGAAGTCGCTGATG AGCTGGTGTCAGAGTTCACCAATTCAAATAACCATTTGGCTGCTGATTCGGCTTATGATCAGAAGAACATTAGGC TTGGCCTGCCTACCAATTCTGCTCAGGAATGTCAGAATCTGGAGATAGAGAAGCAGAGGCGGATAGAACGGATAA AGCAGAAGCGGGCCCAGCTGCAAGAACTTCTCCTACAGCAAATCGCTTTCAAAAAACCTGGTACAGAGAAATCGAC AAAATGAGCAGCAAAACCAGGGCCCGGCCCGGCTCTGAACTCTACCATTCAGCTGCCATTCATAATCATCAATACAA GCAGAAAAACAGTCATAGATTGCAGCATCTCCAGTGACAAGTTTGAGTATCTTTTCAATTTTGACAACACCTTTG AGATCCATGATGACATAGAAGTACTAAAGCGGATGGGAATGTCGTTTGGCCTGGAGTCAGGCAAATGCTCTCTGG AGGATCTGAAACTTGCGAAATCCCTGGTGCCAAAGGCTTTAGAAGGTTATATCACAGATATCTCCACAGGACCTT CTTGGTTAAATCAGGGACTACTTCTGAACTCTACCCAATCAGTTTCAAATTTAGACCTGACCACTGGTGCCACCT TACCCCAGTCAAGTGTAAACCAAGGGTTATGCTTGGATGCAGAAGTGGCCTTAGCAACTGGGCAGTTCCTGGCCC ATGAAGATGAGGAAGATGATGAGGAGGATTCCTCCTCCCCAGAATAAAGACAAGAGAAAAGCCTACGTTTCAATAT TGTGTGTTCAGTGAAAACTAGAGAAACACAATAAGCAAATCACATGAAGGCTGAGATGATTGAGATGAAAGTTAA TGGGGATAATCCCTGAAGAGTTGGCAGTGTGAGTGCAACTCATTTATCTTCTGTGAGGTGGGATTTTTGTGTTCC TCACACCCATGTAATTATTCTTAGAATTGAGATTGCTACACGGAGCAGTCCTTGACGATCGTGTTTCTGACGTTT CTCTTCCTTGCCTGGACTGCCTTTGACAAGGCAGAAATGAACATGAAAAGTCCCCAGGAGAGGGGAGCTGTGTAG TGAGGGATACTGAGGGCAGTCCTGTGGCTGAGGGGCACAGATTGAACTGCTGAACTAGTTGGAGGTCTAGATGAG TTAGATAATTTATAGTAAAACTGAAATTATTATTAGCCAATGCATTGGTGCATAGAATTTACTAGGGCTACTTCT GGAAGCCAAAATAGAATAGCATTTCCATGTGCATTAAATACTTTGCCAGCACTGCCTTTGCCAGCATCCTAAATC TGGAGTTTTACAAAGAAGGAAACTGTATCTTTAGGTTAATCAAAGCTATGCATTTCATATAGCTTTTTCATTTAA CAGTGTGCAATTTGTGAAAATGAACCAAATGTCATTACTTTTGTCTTAAAGAAAAGTCTATTTCAAGAATATGAA CAGCAGTG

PCT/US2003/028547

FIGURE 1275

ACACACACTCCCGCTTGGGCCTCCTCTCTCTCCCGGCTCCATTTTCTCCGCCGCGGGGCCGGGGTCTCCTGT GGGGGCCCAGCCGGTATCCCAGGTCTCCCTTCAGTGCCGGGGTGAACCCCCGGGGGAGCCGAGAGCCGGGGGCCA GACGGGCGGGGGTTGGGGCGGGGGGGGGGGGGGCCCCCAGCGAGTTTGTGGGGAGAAGTAACCAAGCGGGGGAGAG GGCTGAGCAGGGGGGGGCCCCCCCCCCCCAGCTATGGACTAACGGCTACTGGGGCCGCCTCCTCCAGGC GGGGCCCGGGGGGCCTGGGATTGGTGAGTGGGGAGCCTGGGGGGCCCTGGCGAGCCTCCTGGTGGCGGAGACCC CATCACCGACCAGAGCCTGGACGAGGCCCAGGCCAAGAAACACGCCCTAAACTGCCACCGAATGAAGCCTGCTCT CTTTAGCGTCCTGTGTGAAATCAAGGAGAAAACCGGCCTCAGCATTCGGAGCTCCCAGGAGGAGGAGCCGGTGGA CCCACAGCTGATGCGCTTGGACAACATGCTTCTGGCAGAGGGGTGTGGCTGGGCCCGAGAAAGGGGGCGGCTCAGC AGCAGCAGCTGCAGCCTCTGGTGGTGGCGTGTCCCCTGACAACTCCATCGAACACTCGGACTATCG CAGCAAACTTGCCCAGATCCGTCACATATACCACTCGGAACTGGAGAAGTATGAGCAGGCATGTAATGAGTTCAC GACCCATGTCATGAACCTGCTGAGGGAGCAGAGCCGCACCAGGCCCGTGGCCCCCAAAGAGATGGAACGCATGGT GAGCATCATCCATCGAAAGTTCAGCGCCATCCAGATGCAGCTGAAGCAGCACCTGCGAGGCTATGATGATGCT GCGCTCCCGTTTCCTGGATGCCAGACGAAAGCGCCGTAACTTCAGCAGACAGGCCACTGAGGTCCTAAATGAGTA TTTCTACTCCCACCTGAGTAACCCATATCCTAGTGAGGAGGCCCAAGGAGGAGCTTGCCAAGAAGTGTGGCATCAC CGTGTCTCAGGTCTCCAACCGGTTTGGCAACAAGAAGATTCGCTATAAGAAAAACATCGGAAAGTTCCAAGAGGA GGCAAACATCTATGCTGTCAAGACAGCCGTGTCAGTCACCCAGGGGGGCCCACAGCACCAGCACCCCGACACC CCCTTCCTCTGCAGGCTCTGGCGGCTCTTTCAATATCTCAGGATCTGGAGACATGTTTCTGGGGATGCCTGGGCT CAACGGAGATTCCTATTCTGCTTCCCAGGTGGCATCACTCCGACGCTCGATGGGGCCCAGGGGGCTATGGGGATAA CCTCGGGGGAGGCCAGATGTACAGCCCACGGGAAATGAGGGCAAATGGCAGCTGGCAAGAGGCTGTGACCCCCTC TTCAGTGACATCCCCAACGGAGGGACCAGGGAGTGTTCACTCTGATACCTCCAACTGATCTTGCCCCTCAGGGTC ACAGGGGTGGGGGCTCTCACAAGGCGACTCTTGAAGAGGACGCAGGCTTCCAGAGGACAAACCCCAATACAGGAG CTTTCTTTCTTACACAGAAACATGCACATACCCAGAAACCTATTTTCTCAGACCCCTTTTTCTCCTCTGTCTTTC TCTCTCCCTCTCCCACACCTCACACACACATACTCCCACTTGCAACTATTCTGTTTCTCTCCTGGGCTCCCCCAC TTTCCCTTCCCCACCCCACTTGTAGGCTCTGGAATCTGGAGACGCCAGCCCTGCCCAATCAGAGATGCCAAAAAT GGGGACATGACTTCTGGACAGAGGACATGGGACACGCCCCCATGCATCCCCACCCCTGCCCCTCCAGACAGCTTA CTTACCTCATACGCAGCTCATCTTAAACCAATAGAATCGCTTGGTGGACGAGAGTGTCTGACTCAGATATCTACC TGTCTTTTTTTTTTTTTTCTTACTTTCCCATATTAGGGGTGATAGCCAAAGGGGTTCTGGTAAGAGAAAGGGGGACA AACAGAACTGGTAAAGAGGCCCCCCTGGCTCCAGGCCTGTCCATCAGGAAGTAAATTTTACAGGGCACCAAGCTT GGGCTTGCCCTGCTGGCCTCTCATCCCCCTTCTTCCCACAACCCTTGGGCAGGGCTGGACTCAGTAATTTTGAGG AAATTGAAGATGCCATCTTCCCCTGTGAGTGACATGTCTTTAATTTTTTAAAAAAACTCTATTTGAAAATTGGAGG GGGAAGAATGGGAAGGGAGTTATTGCCAAATATGTTAATTATGGGTTGGGGTGCTTGTATATGTATCTTCCTCAA AGATGTGGGGGAAAAGTAACATCAACACTGTCCCATCCTCAGCCCTGAACCCTACCATCTGATCCCCTCAGACAT TCTCAGGATTTTACAAGACTGTCAGAGTGGGGAACCCCTCCCATTAAAGATCCGGGCAGGACTGGGGACAGGTTG GAAATGTGATGGGTTGGGGGGGGGGCATGGGCCGGGGGCAGTTCTCTCCTCACTTGTAAACTTGTGTAGTTT CACAGAAAAAAAAATGCAGTTTTAAATAAAGAAATTTCTTT

PCT/US2003/028547

FIGURE 1276

GCCGGCCGCGTATCCCCCGGCTACCTGGGCCGCCCCCGCGGCGTGCGCGCGTGAGAGGGAGCGCGCGGGCAGCCG $\texttt{CCGGCGCGCGCGCGTGGGGTGCAAACCCCGAGCGTCTACGCTGCC} \underline{\textbf{ATG}} \\ \texttt{AGGGGGCGCGAACGCCTGGGCGCCACT}$ CTGCCTGCTGCTGCCGCCACCCACCTCTCGCGGCAGCAGTCCCCAGAGAGACCTGTTTTCACATGTGGTGG CATTCTTACTGGAGAGTCTGGATTTATTGGCAGTGAAGGTTTTCCTGGAGTGTACCCTCCAAATAGCAAATGTAC TTGGAAAATCACAGTTCCCGAAGGAAAAGTAGTCGTTCTCAATTTCCGATTCATAGACCTCGAGAGTGACAACCT $\tt GTGCCGCTATGACTTTGTGGATGTGTACAATGGCCATGCCAATGGCCAGCGCATTGGCCGCTTCTGTGGCACTTT$ CCGGCCTGGAGCCCTTGTGTCCAGTGGCAACAAGATGATGGTGCAGATGATTTCTGATGCCAACACAGCTGGCAA TGGCTTCATGGCCATGTTCTCCGCTGCTGAACCAAACGAAAGAGGGGATCAGTATTGTGGAGGACTCCTTGACAG TGTAGCCCCAAAGAATCAGCTTATAGAATTAAAGTTTGAGAAGTTTGATGTGGAGCGAGATAACTACTGCCGATA TGATTATGTGGCTGTTTTAATGGCGGGGAAGTCAACGATGCTAGAAGAATTGGAAAGTATTGTGGTGATAGTCC ACCTGCGCCAATTGTGTCTGAGAGAAATGAACTTCTTATTCAGTTTTATCAGACTTAAGTTTAACTGCAGATGG GTTTATTGGTCACTACATATTCAGGCCAAAAAAACTGCCTACAACTACAGAACAGCCTGTCACCACCACATTCCC TTATTGTTCAAGTGACTTTGTATTAGCCGGCACTGTTATCACAACCATCACTCGCGATGGGAGTTTGCACGCCAC AGTCTCGATCATCAACATCTACAAAGAGGGAAATTTGGCGATTCAGCAGGCGGGCAAGAACATGAGTGCCAGGCT GACTGTCGTCTGCAAGCAGTGCCCTCTCCTCAGAAGAGGTCTAAATTACATTATTATGGGCCAAGTAGGTGAAGA TGGGCGAGGCAAAATCATGCCAAACAGCTTTATCATGATGTTCAAGACCAAGAATCAGAAGCTCCTGGATGCCTT AAAAAATAAGCAATGT TAA $\texttt{CAGTGAACTGTGTCCATTTAAGCTGTATTCTGCCATTGCCTTTGAAAGATCTATGT$ TCTCTCAGTAGAAAAAAAATACTTATAAAATTACATATTCTGAAAGAGCATTCCGAAAGATGGGACTGGTTGAC TCTTCACATGATGGAGGTATGAGGCCTCCGAGATAGCTGAGGGAAGTTCTTTGCCTGCTGTCAGAGGAGCAGCTA TCTGATTGGAAACCTGCCGACTTAGTGCGGTGATAGGAAGCTAAAAGTGTCAAGCGTTGACAGCTTGGAAGCGTT AATATTTATAGTGTTATTTGTTTCACCTTCAAGCCTTTGCCCTGAGGTGTTACAATCTTGTCTTGCGTTTTCTAA

PCT/US2003/028547

FIGURE 1277'

MRGANAWAPLCLLLAAATQLSRQQSPERPVFTCGGILTGESGFIGSEGFPGVYPPNSKCTWKITVPEGKVVVLNF RFIDLESDNLCRYDFVDVYNGHANGQRIGRFCGTFRPGALVSSGNKMMVQMISDANTAGNGFMAMFSAAEPNERG DQYCGGLLDRPSGSFKTPNWPDRDYPAGVTCVWHIVAPKNQLIELKFEKFDVERDNYCRYDYVAVFNGGEVNDAR RIGKYCGDSPPAPIVSERNELLIQFLSDLSLTADGFIGHYIFRPKKLPTTTEQPVTTTFPVTTGLKPTVALCQQK CRRTGTLEGNYCSSDFVLAGTVITTITRDGSLHATVSIINIYKEGNLAIQQAGKNMSARLTVVCKQCPLLRRGLN YIIMGQVGEDGRGKIMPNSFIMMFKTKNQKLLDALKNKQC

PCT/US2003/028547

1373/6881 FIGURE 1278

PCT/US2003/028547

1374/6881 FIGURE 1279

 ${\tt MTNTKGKRRATRYMFSRPFRKHGAVPLATYMRIYKKGDIVDIKGMGTVQKGMPHKCYHGKTGRVYNVTQHAVGIV VNKQVKGKILAKRINVRIEHISHSKSRDSFLKCMKENDQKKKEAKEKGTWVQLKFQPAPPREAHFVRTNGKEPEL LELIPYEFMA$

WO 2004/030615 PCT/US2003/028547

1375/6881 FIGURE 1280A

CCGCGGGCGGGCCGGCTTCACGTGACCCGGCGTCATTGGCTCGCCGGGAAGTAGTCCTACATTCGCG ${\tt GTCAGCGCGGGGTCTCCGGGCGCCCTGCAGGGCGGCAGGCTGTGCCATCCCGCCGGACGTCGGG} \underline{{\tt ATG}} {\tt GTGCAGC}$ TGTACAACCTGCACCCGTTCGGGTCGCAGCAGGTGGTGCCCTGCAAGCTGGAGCCGGACCGGTTCTGTGGCGGGG CGCGGTGCGCCTTCTCCACGCTGGGCCGGGTGTTGCGCCTGGCCTACAGCGAGGCTGGAGATTATTTGGTAGCAA TTGAAGAGAAAAACAAAGCTACATTTCTACGTGCTTATGTGAACTGGAGAAATAAAAGGACTGAAAACTCTCGTG TGTGTATCCGAATGATTGGGCATAATGTGGAGGGACCATTCAGCAAAGCCTTCAGAGACCAGATGTACATTATTG AAATGCCGCTTTCGGAGGCCCCCTTGTGCATTTCCTGTTGCCCTGTGAAAGGAGACCTTCTCGTTGGCTGCACAA ATAAATTAGTCTTATTTAGTTTGAAGTACCAGATCATTAATGAGGAATTCTCACTATTGGACTTTGAACGTTCTT TAATTATACACATAGATAATATCACTCCTGTTGAGGTTTCTTTTTGTGTTGGATATGTTGCTGTCATGTCAGACT ACAATCGAATAAGACGGACAGAAGAAGGCATCAGTAATGAAATTTCACAGCTTGAGTCAGATGATTTTGTCATCT GCCAGAAGCCCCTGGAACTTCTTGGTGAAAAAAGTGAACAGTCTGGATTATCTGTTACACTGGAGTCTACGGGAT TAGCTGATGAAAAAAGAAAATATTCCCACTTTCAGCACCTGCTCTATAGACGTTTTGCTCCTGATATTTCGTCCT ATGTCTTGTCTGATGACATCAAGCTACATTCCCTCCAGCTGCTACCCATTTACCAGACCGGTTCTCTTACATCTG ATGGAAAAATTTGTCTCAGGAAAAAGAATTGCTGAGTCTCTTTTGCTTTTTCTCCTTACCTCATGTGGGCTATC CGCCACAATTTTTGCACGTCATTACAAGTAACAACCTGCAGTGTTTCACTGTGCGGTGCAGTGCGGCGGCAGCTC GTGAGGAGGACCCGTACATGGACACCACCCTGAAGGCTTGCCCACCTGTCAGTATGGATGTCTGTGCTTTAAGAA TACAGCTTTTCATAGGCTTGAAAGCCATCTGTCACTTTAAAAACCACATCATACTTTTGACTAAAGCAGAACCTG AAGCCATTCCAGAGAGAAGACAGTCACCCAAGAGGCTTCTTTCGAGAAAAGATACCAGTGTTAAAAATCAAAATAC CTCCTGTAGCTGAGGCTGGGTGGAATTTGTATATTGTGAATACGATCTCACCAGTGCAGCTGTACAAAGAGATGG TAGACTATAGCAATACCTATAAGACTGTCAAAACCCAGAGCTGCATTCACCTTCTCAGTGAGGCTCATCTGTTAG TGCGAGCTGCCCTGATGGATGCCAGTCAGCTGGAACCTGGAGAGAAGGCAGAGCTTTTGGAAGCATTTAAGGAAA GCTGTGGGCACCTTGGGGACTGTTACAGCAGGCTTGACTCCCAGCATTCTCATCTCACCTTGCCATACTATAAGA GAGGATTAATCTTTTACATTAATCATTCACTTTATGAAAACCTGGATGAAGAATTAAATGAAGAATTAGCAGCAA AAGTGGTTCAGATGTTTTATGTGGCTGAGCCAAAGCAAGTGCCCCATATTCTCTGTAGTCCTTCTATGAAGAATA TTAATCCTTTAACTGCCATGAGCTATCTAAGGAAGCTGGATACTTCTGGGTTTTCATCGATCTTAGTGACATTGA CCAAGGCAGCAGTGGCTCTGAAAATGGGAGATCTTGACATGCACAGAAATGAAATGAAAAGCCATTCAGAGATGA AGTTGGTATGTGGCTTCATTCTGGAACCTCGGCTGTTGATTCAACAGAGAAAGGGACAGATTGTTCCAACCGAGC TTGCACTTCACTTGAAGGAAACTCAGCCTGGATTGCTTGTGGCTTCAGTTCTGGGCTTGCAGAAGAACAACAAAA TTGGAATTGAAGAAGCAGATTCCTTTTTTAAGGTGCTTTGTGCTAAGGATGAAGATACAATTCCTCAGCTCTTGG TAGACTTTTGGGAAGCTCAGCTAGTGGCATGTCTCCCAGATGTGGTACTTCAGGAACTCTTTTTCAAACTCACAT CACAGTACATCTGGAGATTGTCTAAGAGGCAGCCTCCTGACACCACCACTGCGAACATCGGAGGATCTGATAA ATGCCTGTAGTCATTATGGCTTAATTTATCCATGGGTTCACGTCGTAATATCATCTGATTCTTTAGCTGATAAAA ATTATACAGAAGATCTTTCAAAATTACAGTCTCTTATATGTGGTCCTTCATTTGACATAGCTTCCATTATTCCGT TCTTGGAGCCACTTTCAGAAGACACTATTGCCGGCCTCAGTGTCCATGTTCTGTGTCGTACACGCTTGAAAGAGT ATGAACAGTGCATAGACATACTGTTAGAGAGATGCCCGGAGGCAGTCATTCCATATGCTAATCATGAACTGAAAG AAGAGAACCGGACTCTGTGGTGGAAAAAACTGTTGCCTGAACTTTGTCAGAGAATAAAATGTGGTGGAGAAAAATGT ATCAACTCTACCTGTCATCATTAAAAGAAACATTGTCAATTGTTGCTGTGGAACTAGAACTGAAGGATTTCATGA CTTAAAGGTATCATTTGAAAAATACCATAATGGCATTTGAGACTGAATTTCTAAAAATTGAATGCCAAAGTACAA TGTCTAGAATGTAAAAAGTCTTTAAGACATAAGAATTCCTCAAAGAAGCCATACATTTTTTAAGGTGGGGATTGA CTTTTATTCCAAGGAACAACATCAGTTCACTGTTGTTGGAGACATGACAATCATTTTCATCCCAAGAACACTTTA AGGAAACATTTTACAAGTATGCTTGAAAGAATGTCACTAACTGGTCCAGAATTTTATCTTCTTGATTTTTCCAGA

PCT/US2003/028547

FIGURE 1280B

PCT/US2003/028547

FIGURE 1281

MVQLYNLHPFGSQQVVPCKLEPDRFCGGGRDALFVAAGCKVEAFAVAGQELCQPRCAFSTLGRVLRLAYSEAGDY
LVAIEEKNKATFLRAYVNWRNKRTENSRVCIRMIGHNVEGPFSKAFRDQMYIIEMPLSEAPLCISCCPVKGDLLV
GCTNKLVLFSLKYQIINEEFSLLDFERSLIIHIDNITPVEVSFCVGYVAVMSDLEVLIVKLESGPKNGERVHHHP
HKTNNRIRRTEEGISNEISQLESDDFVICQKPLELLGEKSEQSGLSVTLESTGLADEKRKYSHFQHLLYRRFAPD
ISSYVLSDDIKLHSLQLLPIYQTGSLTSDGKNLSQEKELLSLFCFFSLPHVGYLYMVVKSVELMSVYQYPEKSQQ
AVLTPQFLHVITSNNLQCFTVRCSAAAAREEDPYMDTTLKACPPVSMDVCALRIQLFIGLKAICHFKNHIILLTK
AEPEAIPERRQSPKRLLSRKDTSVKIKIPPVAEAGWNLYIVNTISPVQLYKEMVDYSNTYKTVKTQSCIHLLSEA
HLLVRAALMDASQLEPGEKAELLEAFKESCGHLGDCYSRLDSQHSHLTLPYYKMSGLSMAEVLARTDWTVEDGLQ
KYERGLIFYINHSLYENLDEELNEELAAKVVQMFYVAEPKQVPHILCSPSMKNINPLTAMSYLRKLDTSGFSSIL
VTLTKAAVALKMGDLDMHRNEMKSHSEMKLVCGFILEPRLLIQQRKGQIVPTELALHLKETQPGLLVASVLGLQK
NNKIGIEEADSFFKVLCAKDEDTIPQLLVDFWEAQLVACLPDVVLQELFFKLTSQYIWRLSKRQPPDTTPLRTSE
DLINACSHYGLIYPWVHVVISSDSLADKNYTEDLSKLQSLICGPSFDIASIIPFLEPLSEDTIAGLSVHVLCRTR
LKEYEQCIDILLERCPEAVIPYANHELKEENRTLWWKKLLPELCQRIKCGGEKYQLYLSSLKETLSIVAVELELK
DFMNVLPEDGTATFFLPYLLYCSRKKPLT

PCT/US2003/028547

1378/6881 FIGURE 1282

GGCACGAGGGCTTCTCCTGCGCCTCTTTTCGCCCAGCACTAGCGCCTTAGGCCAGCTCGGGGGATGTGAGAGCC GAAGCCCTTAGACTGCCAGGCACAGAGTCGGGTCGGGATTTGTCAGCCAAGCCTCGGCTCCAGCTCCGCAATCTC ${\tt TCGCTGCCCGCCCAGAAG{\tt ATG}}$ ATCCGGCCTCGGCGCCCCCTCCGCTCCGCCGCCTGGGCAGCAAGTGATCCAC GTCACGCAGGACCTAGACACAGACCTCGAAGCCTCTTCAACTCTGTCATGAATCCGAAGCCTAGCTCGTGGCGG AAGAAGATCCTGCCGGAGTCTTTCTTTAAGGAGCCTGATTCGGGCTCGCACTCGCGCCAGTCCAGCACCGACTCG TCGGGCGGCCACCCGGGGCCTCGACTGGCTGGGGGTGCCCAGCATGTCCGCTCGCACTCGTCGCCCGCGTCCCTG CAGCTGGGCACCGGCGCGGGTGCTGCGGGTAGCCCCGCGCAGCAGCACCGCGCACCTCCGCCAGCAGTCCTACGAC GTGACCGACGAGCTGCCACTGCCCCCGGGCTGGGAGATGACCTTCACGGCCACTGGCCAGAGGTACTTCCTCAAT CACATAGAAAAATCACCACATGGCAAGACCCTAGGAAGGCGATGAATCAGCCTCTGAATCATATGAACCTCCAC CCTGCCGTCAGTTCCACACCAGTGCCTCAGAGGTCCATGGCAGTATCCCAGCCAAATCTCGTGATGAATCACCAA AGTATGCCCAATGCGCTGACCACTCAGCAGCAGCAGCAGCAGAAACTGCGGCTTCAGAGAATCCAGATGGAGAGA GAAAGGATTCGAATGCGCCAAGAGGAGCTCATGAGGCAGGAAGCTGCCCTCTGTCGACAGCTCCCCATGGAAGCT AGCTCAGATCCTTTCCTCAATGGAGGGCCATATCATTCGAGGGAGCAGAGCACTGACAGTGGCCTGGGGTTAGGG TGCTACAGTGTCCCCACAACTCCGGAGGACTTCCTCAGCAATGTGGATGAGATGGATACAGGAGAAAACGCAGGA CAAACACCCATGAACATCAATCCCCAACAGACCCGTTTCCCTGATTTCCTTGACTGTCTTCCAGGAACAAACGTT GACTTAGGAACTTTGGAATCTGAAGACCTGATCCCCCTCTTCAATGATGTAGAGTCTGCTCTGAACAAAAGTGAG $\texttt{CCCTTTCTAACCTGGCTG} \underline{\textbf{TAA}} \texttt{TCACTACCATTGTAACTTGGATGTAGCCATGACCTTACATTTCCTGGGCCTCTT}$ GGAAAAAGTGATGGAGCAAGTCTGCAGGTGCACCACTTCCCGCCTCCATGACTCGTGCTCCCTCTTTTT TCTCTTCTTCTCTGCTGCCCCATGGCTAAGCTTTATGGGTGTTAATTGAAATTTATACACCAATTGATTTAAA CCATAAAAAGCTGACCACAGGCAGTTACTTCTGAGGGCATCTTGGTCCAGGAAATGTGCACAAAATTCGACCTGA TTTACAGTTTCAAAAACTGTATTGATGACAGTAGTACCAAATGCTTTAAAAACTATTTAACTTGAGCTTTAAAAA

PCT/US2003/028547

FIGURE 1283

MNPASAPPPLPPPGQQVIHVTQDLDTDLEALFNSVMNPKPSSWRKKILPESFFKEPDSGSHSRQSSTDSSGGHPG PRLAGGAQHVRSHSSPASLQLGTGAGAAGSPAQQHAHLRQQSYDVTDELPLPPGWEMTFTATGQRYFLNHIEKIT TWQDPRKAMNQPLNHMNLHPAVSSTPVPQRSMAVSQPNLVMNHQHQQQMAPSTLSQQNHPTQNPPAGLMSMPNAL TTQQQQQQKLRLQRIQMERERIRMRQEELMRQEAALCRQLPMEAETLAPVQAAVNPPTMTPDMRSITNNSSDPFL NGGPYHSREQSTDSGLGLGCYSVPTTPEDFLSNVDEMDTGENAGQTPMNINPQQTRFPDFLDCLPGTNVDLGTLE SEDLIPLFNDVESALNKSEPFLTWL

PCT/US2003/028547

1380/6881 FIGURE 1284

GCGCTTGCGGCGCCCAGGCCCAGCGCCGTAGCTAGCGTCTGGCCTGAGAACCTCGGCGCTCCGGCGCGCGGCG ACCACGAGCCGAGCCTCGCAGCGGCTCCAGAGGAGGCAGCGAGTGAGCGAGTCCGAGGGGTGGCCGGGCAGGT GGTGGCGCGCGAAGATGGTCGCCAAGCAAAGGATCCGTATGGCCAACGAGAAGCACAGCAAGAACATCACCCAG TTCATTTTTGTTGTCTGTGGTTCTGCAATTTTCCAGATTATTCAAAGTATCAGGATGGGCATG**TGA**GTGACTGA CCTTAAGATGTTTCCATTCTCCTGTGAATTTTAACTTGAACTCATTCCTGATGTTTGATACCCTGGTTGAAAACA ATTCAGTAAAGCATCCTGCCTCAGAATGACTTTCCTATCATGCTTCATGTGTCATTCCAAGGTTTCTTCATGAGT CATTCCAAGTTTTCTAGTCCATACCACAGTGCCTTGCAAAAAACACCACATGAATAAAGCAATAAAATTTGATTG GAACAATTAGTCTAACTCTGCATAGACAGGGTCTAGATTTTGTTAACCCAAATGTATAACTGCAGTTAGCTTAAA TTACAATTTGAAGTCTTGTGGTTTTTATATAGCTAGGCACTTTATTACTCTTTTGAACTGAAAGCACACTCCCTT ATAGGTTCATGTAACTGTCCTGTAATAAGGTGCTTATAAATGGAACAACTACACAGCCTAGTTTTGCCACAACCT TTAGCATCTAAAAAGTTTTAAAAGCTTCTAAATGTCTAATATAAAGGGAGATGCTTATAGCCACAACATCTATTT GGAAGGTTTGTTTATGTTACATTTATTTCACCAGAACTATTTTAATATATCAAAGGGGTTTACTATGCCAAACAA AATTCTAGGGAAAAATACTGCTAAAAATGGATGCCTCATCAGAACATGCTGTTGAGTCCAATGTGCCATAAGACA TTTTAGCATGTTAAATAGCACTTTTAATAGCAAAAAAAGGCACATCAACTGCGAAGTTATCCTTAGTTTGCAAAT GCTTTTTCTAGATTAATGATTTTTCAATCATTAGGGTACTAGACACATCAGCCTAAAGTGGCATCTGGAATTGAA ACGTTTTACTAATGGTAAGGGTGAGGGTCATAGGGCAGGTTTTGGGTTTTCTAGTACTGTTGAAAACTGCAAGTA GAAAGCTGCTTGTGTTTGTTAATTGCCTCAGGATATTTCTTTTAAAATAAGCTGTTTTAAGAGGAACAGA AGGGAAATCTGCTACCTAGTCTATACACAGCGTGAACCTCACAGGGGGCTTCTGATACCCTCAAACATGGAGAAC GGCCAGCAGGTTTTTAACTAAATTGTTACTTGCCTTTCTCACCCAGTTAATCAGTCTCTGTACTTGTTTCCCTTT TTGAAACAAGTGTCTTGGTTAACTAATTCTGTTTTATGGTTGTCTAAATTCATAGCAGGTGCCTTATTCTTTGC ATTGCATTCCCTTTGTATTTCATGTGTAATTCACCAATTAAGTGCAGTTTATATTCAGGTTGGATTATGCATGTT ΑΑΑΑΑΑΑΑΑΑΑ

PCT/US2003/028547

1381/6881 FIGURE 1285

MVAKQRIRMANEKHSKNITQRGNVAKTSRNAPEEKASVGPWLLALFIFVVCGSAIFQIIQSIRMGM

PCT/US2003/028547

1382/6881 FIGURE 1286

GCATGAGGAGACGTGTAGGGGCCGGGTTCGGCCCTGGTGAACTCTCACCCGAGCGGTTTCTCTTTCCGGGACAAC XXXXXXXXXXXXXXXXXXXXXXGGAATCTGGGAAGAATTGCAAAGTCTGTATCTTTAGTAAGGATGGGACCTTG TTTGCCTGGGGCAATGGAGAAAAGTAAATATTATCAGTGTCACTAACAAGGGACTACTGCACTCCTTCGACCTC CTGAAGGCAGTTTGCCTTGAATTCTCACCCAAAAATACTGTCCTGGCAACGTGGCAGCCTTACACTACTTCTAAA GATGGCACAGCTGGGATACCCAACCTACAACTTTATGATGTGAAAACTGGGACATGTTTGAAATCTTTCATCCAG AAAAAAATGCAAAATTGGTGTCCATCCTGGTCAGAAGATGAAACTCTTTGTGCCCGCAATGTTAACAATGAAGTT TCACCTGGACCCCAACCATACAAGGTGGCTGTCTATGTTCCAGGAAGTAAAGGTGCACCTTCATTTGTTAGATTA TATCAGTACCCCAACTTTGCTGGACCTCATGCAGCTTTAGCTAATAAAAGTTTCTTTAAGGCAGATAAAGTTACA TATGGAGAACAACTCTACACTACATTGCAACAAATGGAGAAAGTGCTGTAGTGCAATTACCAAAAAATGGCCCC ATTTTCAACTTGAAATGTGATCCTGTATTTGACTTTGGAACTGGTCCTCGTAATGCAGCCTACTATAGCCCTCAT GGACATATATTAGTATTAGCTGGATTTGGAAATCTGAGGGGACAAATGGAAGTGTGGGATGTGAAAAACTACAAA CTTATTTCTAAACCGGTGGCTTCTGATTCTACATATTTTGCTTGGTGCCCGGATGGTGAGCATATTTTAACAGCT ACATGTGCTCCCAGGTTACGGGTTAATAATGGATACAAAATTTGGCATTATAGTGGCTCTATCTTGCACAAGTAT ATAACTTACCAAGCAGTTCCAAGTGAAGTACCCAATGAGGAACCTAAAGTTGCAACAGCTTATAGACCCCCAGCT TTAAGAAATAAACCAATCACCAATTCCAAATTGCATGAAGAGGAACCACCTCAGAATATGAAACCACAATCAGGA AACGATAAGCCATTATCAAAAACAGCTCTTAAAAATCAAAGGAAGCATGAAGCTAAGAAAGCTGCAAAGCAGGAA GCAAGAGTGACAAGAGTCCAGATTTGGCACCTACTCCTGCCCCACAGAGCACACCACGAAACACTGTCTCTCAG TCAATTTCTGGGGACCCTGAGATAGACAAAAAAATCAAGAACCTAAAGAAGAAACTGAAAGCAATCGAACAACTG AAAGAACAAGCAGCAACTGGAAAAACAGCTAGAAAAAAATCAG

PCT/US2003/028547

1383/6881 FIGURE 1287

MQNWCPSWSEDETLCARNVNNEVHFFENNNFNTIANKLHLQKINDFVLSPGPQPYKVAVYVPGSKGAPSFVRLYQ
YPNFAGPHAALANKSFFKADKVTMLWNKKATAVLVIASTDVDKTGASYYGEQTLHYIATNGESAVVQLPKNGPIY
DVVWNSSSTEFCAVYGFMPAKATIFNLKCDPVFDFGTGPRNAAYYSPHGHILVLAGFGNLRGQMEVWDVKNYKLI
SKPVASDSTYFAWCPDGEHILTATCAPRLRVNNGYKIWHYTGSILHKYDVPSNAELWQVSWQPFLDGIFPAKTIT
YQAVPSEVPNEEPKVATAYRPPALRNKPITNSKLHEEEPPQNMKPQSGNDKPLSKTALKNQRKHEAKKAAKQEAR
SDKSPDLAPTPAPQSTPRNTVSQSISGDPEIDKKIKNLKKKLKAIEQLKEQAATGKQLEKNQLEKIQKETALLQE
LEDLELGI

PCT/US2003/028547

1384/6881 FIGURE 1288A

GGCCGTTGCTCCAGGGAGAACTGCAAATATCTTCATCCACCCCCACATTTAAAAACGCAGTTGGAGATAAATGGA CGCAATAACTTGATTCAGCAGAAGAACATGGCCATGTTGGCCCAGCAAATGCAACTAGCCAATGCCATGATGCCT GGTGCCCCATTACAACCCGTGCCAATGTTTTCAGTTGCACCAAGCTTAGCCACCAATGCATCAGCAGCCGCCTTT AATCCCTATCTGGGACCTGTTTCTCCAAGCCTGGTCCCGGCAGAGATCTTGCCGACTGCACCAATGTTGGTTACA GTATGTCGAGAGTACCAACGTGGCAATTGCAACCGAGGAGAAAATGATTGTCGGTTTTGCTCATCCTGCTGACAGC TGCAAATACTTTCATCCCCTGCACATTTGCAAGCCAAGATCAAGGCTGCCCAATACCAGGTCAACCAGGCTGCA GCTGCACAGGCTGCAGCCACCGCAGCTGCCATGACTCAGTCGGCTGTCAAATCACTGAAGCGACCCCTCGAGGCA ACCTTTGACCTGGGAATTCCTCAAGCTGTACTTCCCCCATTACCAAAGAGGCCTGCTCTTGAAAAAACCAACGGT GCCACCGCAGTCTTTAACACTGGTATTTTCCAATACCAACAGGCTCTAGCCAACATGCAGTTACAACAGCATACA AGTGTTCCCTTCGCTGCAACAGCCACAGCCAACCAGATACCCATAATATCTGCCGAACATCTGACTAGCCACAAG TATGTTACCCAGATGTAGAATTTTCATCACTAAACAATCATGCTAAAGAGGAAAGGACAGTGTGCTTGGTTAGAG TAAAGGACGAGGTCATTAGCCATATTGTATATATCGTCAAGCAACACACAAAAGTTCCTCAGCCACAAGACAT CCACATATTGCATGTTAACCAGAAGAAAAGACAACATTTTCCGGAAATCCACTGCACACTGTTGCCTATACACTT TGTAACCATGATTCTATTATGTATTGGTACGTCTGTAGACCAAGATATAATTTTTTAAAAATAAGTTTATTTCTT TGTGCCAAGCAAAACCACAACTGTGTATATTTTAAAGCACATCATGGCTTTAAGTACCATGTTGTTAAGGATTCT CATGAAGTGCCATAGACTGTACATCAAATTAGAGTATTATTTCTTCAGTGTTTATTGTTTTCAGAGCCACATTTTG ACTGGAGATATATATATATAGATATATATAAAATTATTTTAATGCATTGTAGTGTAATATTTTATGCATACTATA CTGTATAACATGTTATTCAAAAGGGATTGCCATTTCTGAGACACAGTAACAAAAAAATGAGGAAATTATTTTGCT TCTATTTATAGCCTCTGTCAAAAGTCAAAAGACTATAAATGCTTTGCAAAAATGGTTTCACGTTTGCTTAAATGC TTCATCACAGTCACATTCAAAATAGTGACTCTAAACAAAGAAGAAGCAGCACTGTCATCAGATGCATGATAAAC AATAGATGTGCATTCAGTTTTTAAGAATGGAATCATCCAAAGGAATTCCTTTTTTTGAGGTTTGGATGTTGCAGC TAGTAAAGGATATTTTTGCTCTGTTCAGCAGTTCTAAAAATTGCTGAAGTAGGGGCCAGGTCACTGGTAGTTATA GTATGGAATGGGAGAAGTTGAAAGTTCAGTTATAGAACTTTCCATACTTCCAAGTTTACTGCAAGTTTTTATGCTT GAGAGAGATGCTTTCTAATATAAGACTGATGTTGTTTACTGATTTTACTGATTGTACATCTATTAAAGCCTTAGA TTATTACATTACGGGTTGGAACCCATACCAATGTAATTTCAATCGTGTTAAGAAAGTAATGGTGACTTCACATGT TATTGTAGTTAGTTACATTATAGAATATTACTTATTTTTCTTGTTAAAATGTAGTTTTCATTTCCTACATTTAT TAGATTTTCATTTTCTATTAACAATTGAATACCATTTCAGTTTATAGACTTGTTTTATTAGATTTTACCAATGAA TTTTTCAAAATACAAAAAAAGTAGTTTTTCCTTCATAACATACTCAGTTTTGAATTACATGTAGTGTCACATGA GTTCTTGTCTAGTTTTCATTAAAAGAACAAAGATCTTTTATATGGATATCTTATAAATATATAATCATTGCTAAG TAGAACAAGGGACTTTTTGTTGATAATCCAAATACTCAAAGTTTACGTAATGAAAATTATAGCGTGTGTGCAAAC TCTTGAGGGTTGATTATGCTGCAATTTAGCATGTTGGAACGTCTAGGGAGAGGTTGACTTTTTGCACTTCTGTA TATAGTCAAAAGAGAGAAACCTGTATAATAGTAAGATCTTATTTTGAATAAAAACGTCTATAATTACAAGGAGTT

PCT/US2003/028547

1385/6881 FIGURE 1288B

PCT/US2003/028547

FIGURE 1289

ATGTGGAGAAGCCAGGGGACCCACAGAAGGCTGCCTGTGGCCACGTCATAGCAAAGGAACTTTATGGAGAGGAG CAGGAAGTCAGAGAGCCAGCTGAATTCAAGAATCTGATAGGAGAGAAGATGTCAGTCCCTCTGGAAGAAGTTAGC AAAGTTGTGGCCTTGAATGGGAAGGGACAGAAGAGAGGGTTCAGGGTTCGAGGCTGAGGCAACAGGAAACTGCCTG GAATGGAACTTGCCAAGGGGGATAGGAGGTGCAGGCCGGGGCCTCTTGGGAGAAAGAGCTGCACCATCTTCCAAC ACCTGTGGGAATGCTGTCTTGAAAACACTGCAGCAGCCAGTCATGAGCCAAGGAAGCAGCAACGAACA CAGGCATTGTGCATACAGACCTACCCAGAGAAGCCAGTATCCATGGCTTTGGAGAGTTCAAATATTCAATTTTCC GTTCAAAAAAAGGCCACGCCACCGGCTAAGAGTTCCGCCAGGGGCCCAGCTCTCAGGAGGCCTCTTCGGTGCCGC CAGCCTCCGAAGTCATCCAAGGTAGCAGGCAAATCCGGCAGCAAACTAGCTCGGATTCGGCTTCGGTTTTT CGACCCTTCCGGCACCCTCCCGCCCCGTCTCGTACTGTCGCCGTCACCGCCGCGGCTCCGGCCCTGGCCCCGATG GCTCTGTGCAACGGAGACTCCAAGCCTTGGGCTCCGCGGCGGTTAGGCCGGTTCTGGACGAACCCCTCGGAGCTG CACTGTCTTCCCCCCCAACGCCCCTGCAGGCCCGCGTGAGGGCTGGTGGCCCCAGGGTCGCGCACTCCGTT CTCCCTCCCGCTTCCTCTCAGAGAGGAAAGGGTGTGTGTCCAGGTCCCGCCTCCGTCCAGCTTGCTCCCTGTC GCCCGAGGCCTGGGCAGTCCGGAGTTCCGGAGTGCTGGAAAAGTTGCCGCCTTGACGTACCCGGCGGGGAGAGCA CGTTTGACCGCTGCTCCTCTCTCCTCCAACTCACTTTTCTTAGACCGTTCCTCTTACTTTCGTCCCGCTTTT

PCT/US2003/028547

1387/6881 FIGURE 1290

AGGCATAGCAAATGAATCTAAAAAGTTATATGGAGCACAGTTCCACCCTGAAGTTGGCCTTACAGAAAATGGAAA AGTAATACTGAAGAATTTCCTTTATGATATAGCTGGATGCAGTGGAACCTTCACCGTGCAGAACAGAGAACTTGA GTGTATTCGAGAGATCAAAGAGAGAGAGTGGCACGTCAAAAGTTTTGGTTTTACTCAGTGGTGGAGTAGACTCAAC AGTTTGTACAGCTTTGCTAAATCGTGCTTTGAACCAAGAACAAGTCATTGCTGTGCACATTGATAATGGCTTTAT GAGAAAACGAGAAAGCCAGTCTGTTGAAGAGGCCCTCAAAAAGCTTGGAATTCAGGTCAAAGTGATAAATGCTGC TCATTCTTCTACAATGGAACAACCCCTACCAATATCAGATGAAGATAGAACCCCACGGAAAAGAATTAGCAA AACGTTAAATATGACCACAAGTCCTGAAGAGAAAAAGAAAAATCATTGGGGATACTTTTGTTAAGATTGCCAATGA AGTAATTGGAGAAATGAACTTGAAACCAGAGGAGGTTTTCCTTGCCCAAGGTACTTTACGGCCTGATCTAATTGA AAGTGCATCCCTTGTTGCAAGTGGCAAAGCTGAACTCATCAAAACCCATCACAATGACACAGAGCTCATCAGAAA GTTGAGAGAGGGGGAAAAGTAATAGAACCTCTGAAAGATTTTCATAAAGATGAAGTGAGAATTTTGGGCAGAGA ACTTGGACTTCCAGAAGAGTTAGTTTCCAGGCATCCATTTCCAGGTCCTGGCCTGGCAATCAGAGTAATATGTGC TGAAGAACCTTATATTTGTAAGGACTTTCCTGAAACCAACAATATTTTGAAAATAGTAGCTGATTTTTCTGCAAG TGTTAAAAAGCCACATACCCTATTACAGAGAGTCAAAGCCTGCACAACAGAAGAGGATCAGGAGAAGCTGATGCA AATTACCAGTCTGCATTCACTGAATGCCTTCTTGCTGCCAATTAAAACTGTAGGTGTGCAGGGTGACTGTCGTTC CTACAGTTACGTGTGTGGAATCTCCAGTAAAGATGAACCTGACTGGGAATCACTTATTTTTCTGGCTAGGCTTAT ACCTCGCATGTGTCACAACGTTAACAGAGTTGTTTATATATTTTGGCCCACCAGTTAAAGAACCTCCTACAGATGT TACTCCCACTTTCTTGACAACAGGGGTGCTCAGTACTTTACGCCAAGCTGATTTTGAGGCCCATAACATTCTCAG GGAGTCTGGGTATGCTGGGAAAATCAGCCAGATGCCGGTGATTTTGACACCATTACATTTTGATCGGGACCCACT TCAAAAGCAGCCTTCATGCCAGAGATCTGTGGTTATTCGAACCTTTATTACTAGTGACTTCATGACTGGTATACC TGCAACACCTGGCAATGAGATCCCTGTAGAGGTGGTATTAAAGATGGTCACTGAGATTAAGAAGATTCCTGGTAT TTCTCGAATTATGTATGACTTAACATCAAAGCCCCCAGGAACTACTGAGTGGGAGTAATAAACTTC

PCT/US2003/028547

FIGURE 1291

PCT/US2003/028547

1389/6881 FIGURE 1292A

GATGAAGAGAAAATCAAACAAGAAATTAACATGTTGAAGAAATATTCTCATCACCGGAATATTGCTACATAC GGCTCTGTCACCGACCTGATCAAGAACACAAAAGGTAACACGTTGAAAGAGGGGGGTGGATTGCATACATCTGCAGG GAAATCTTACGGGGGCTGAGTCACCTGCACCAGCATAAAGTGATTCATCGAGATATTAAAGGGCAAAATGTCTTG CTGACTGAAAATGCAGAAGTTAAACTAGTGGACTTTGGAGTCAGTGCTCAGCTTGATCGAACAGTGGGCAGGAGG AATACTTTCATTGGAACTCCCTACTGGATGGCACCAGAAGTTATTGCCTGTGATGAAAACCCAGATGCCACATAT GATTTCAAGAGTGACTTGTGGTCTTTGGGTATCACCGCCATTGAAATGGCAGAAGGTGCTCCCCCTCTCTGTGAC ATGCACCCCATGAGAGCTCTCTTCCTCATCCCCGGAACCCAGCGCCTCGGCTGAAGTCTAAGAAGTGGTCAAAA CATCCATTTATACGAGACCAACCTAATGAGCGACAGGTCCGCATTCAACTCAAGGACCATATTGATAGAACAAAG GGAGAGCCCAGCTCCATCCTGAATCTGCCAGGGGAGTCGACGCTGCGGAGGGACTTTCTGAGGCTGCAGCTGGCC AACAAGGAGCGTTCTGAGGCCTACGGAGGCAGCAGCTGGAGCAGCAGCAGCGGGAGAATGAGGAGCACAAGCGGC AGCTGCTGGCCGAGCGTCAGAAGCGCATCGAGGAGCAGAAAGAGCAGAGGCGGCGGCTGGAGGAGCAACAAAGGC GAGAGAGGAGCTGCGGAAGCAGCAGGAGGGGGGGCACCGCCGCCCTATGAGGAGCAGATGCGCCGGGAGGAGG AGAGGAGGCGTGCGGAGCATGAACAGGAATACATCAGGCGACAGTTAGAGGAGGAGCAGAGACAGTTAGAGATCT TGCAGCAGCAGCTACTGCATGAACAAGCTCTACTTCTGGAATATAAGCGCAAACAATTGGAAGAACAGAGACAAG CAGAAAGACTGCAGAGGCAGCTAAAGCAAGAAAGAGACTACTTAGTTTCCCTTCAGCATCAGCGGCAGGAGCAGA GGCCTGTGGAGAAGAGCCACTGTACCATTACAAAGAAGGAATGAGTCCTAGTGAGAAGCCAGCATGGGCCAAGG AGGTAGAAGAACGGTCAAGGCTCAACCGGCAAAGTTCCCCTGCCATGCCTCACAAGGTTGCCAACAGGATATCTG ACCCCAACCTGCCCCCAAGGTCGGAGTCCTTCAGCATTAGTGGAGTTCAGCCTGCTCGAACACCCCCCATGCTCA GACCAGTCGATCCCCAGATCCCACATCTGGTAGCTGTAAAATCCCAGGGACCTGCCTTGACCGCCTCCCAGTCAG TGCACGAGCAGCCCACAAAGGGCCTCTCTGGGTTTCAGGAGGCTCTGAACGTGACCTCCCACCGCGTGGAGATGC CACGCCAGAACTCAGATCCCACCTCGGAAAATCCTCCTCTCCCCACTCGCATTGAAAAGTTTGACCGAAGCTCTT GGTTACGACAGGAAGAAGACATTCCACCAAAGGTGCCTCAAAGAACAACTTCTATATCCCCAGCATTAGCCAGAA TCCGGAGAACTGAGCCCATCTTGGAGAGCCCCTTGCAGAGGACCAGCAGTGGCAGTTCCTCCAGCTCCAGCACCC CTAGCTCCCAGCCCAGCTCCCAAGGAGGCTCCCAGCCTGGATCACAAGCAGGATCCAGTGAACGCACCAGAGTTC GAGCCAACAGTAAGTCAGAAGGATCACCTGTGCTCCCCCATGAGCCTGCGAAGGTGAAACCAGAAGAATCCAGGG ACATTACCCGGCCCAGTCGACCAGCTAGCTACAAAAAAGCTATAGATGAGGATCTGACGGCATTAGCCAAAGAAC TAAGAGAACTCCGGATTGAAGAAACAAACCGCCCAATGAAGAAGGTGACTGATTACTCCTCCTCCAGTGAGGAGT CAGAAAGTAGCGAGGAAGAGGAGGAGAGAGAGAGGGGGACCCATGATGGGACAGTGGCTGTCAGCGACATAC CCAGACTGATACCAACAGGAGCTCCAGGCAGCAACGAGCAGTACAATGTGGGAATGGTGGGGACGCATGGGCTGG AGACCTCTCATGCGGACAGTTTCAGCGGCAGTATTTCAAGAGAAGGAACCTTGATGATTAGAGAGACGTCTGGAG AGAAGAAGCGATCTGGCCACAGTGACAGCAATGGCTTTGCTGGCCACATCAACCTCCCTGACCTGGTGCAGCAGA GCCATTCTCCAGCTGGAACCCCGACTGAGGGACTGGGGCGCGTCTCAACCCATTCCCAGGAGATGGACTCTGGGA CTGAATATGGCATGGGGAGCACCAAAGCCTCCTTCACCCCCTTTGTGGACCCCAGAGTATACCAGACGTCTC CCACTGATGAAGATGAAGAGGATGAGGAATCATCAGCCGCAGCTCTGTTTACTAGCGAACTTCTTAGGCAAGAAC CACCAGAAATCAGAAAATACAAGAAACGATTCAACTCAGAAATACTTTGTGCAGCTCTGTGGGGTGTAAACCTTC TGGTGGGGACTGAAAATGGCCTGATGCTTTTGGACCGAAGTGGGCAAGGCAAAGTCTATAATCTGATCAACCGGA GGCGATTTCAGCAGATGGATGTGCTAGAGGGACTGAATGTCCTTGTGACAATTTCAGGAAAGAAGAATAAGCTAC GAGTTTACTATCTTTCATGGTTAAGAAACAGAATACTACATAATGACCCAGAAGTAGAAAAGAAACAAGGCTGGA TCACTGTTGGGGACTTGGAAGGCTGTATACATTATAAAGTTGTTAAATATGAAAGGATCAAATTTTTGGTGATTG CCTTAAAGAATGCTGTGGAAATATATGCTTGGGCTCCTAAACCGTATCATAAATTCATGGCATTTAAGTCTTTTG CAGATCTCCAGCACAAGCCTCTGCTAGTTGATCTCACGGTAGAAGAAGGTCAAAGATTAAAGGTTATTTTTGGTT CACACACTGGTTTCCATGTAATTGATGTTGATTCAGGAAACTCTTATGATATCTACATACCATCTCATATTCAGG GCAATATCACTCCTCATGCTATTGTCATCTTGCCTAAAACAGATGGAATGGAAATGCTTGTTTGCTATGAGGATG

PCT/US2003/028547

1390/6881 FIGURE 1292B

AGGGGGTGTATGTAAACACCTATGGCCGGATAACTAAGGATGTGGTGCTCCAATGGGGAGAAATGCCCACGTCTG TGGCCTACATTCATTCCAATCAGATAATGGGCTGGGGCGAGAAAGCTATTGAGATCCGGTCAGTGGAAACAGGAC TTGCATCCGTGCGATCTGGAGGAAGTAGCCAAGTGTTTTTCATGACCCTCAACAGAAATTCCATGATGAACTGGT AACAGAAGAGCACTTGGCACTTATCTTCATGGCGTTATTTCTAATTTAAAAGAACATAACTCATGTGGACTTATG GTACAGTCCATCTTTCAATGTTGCAGCCTGGTTGAGAAGGAGAAAAAGGTGGCAGGAATTTCCAGGAGATCCC CAAGAATGCTGCCTTGTCTGTGGACAAAGATGGACCATGTGCCCTTCGGAATTAGGGATAGAAACAAATATTGTG TGCTCTTAACGATTAAGCTGTGTTATGGTGGGTTTTTCAGGTTTTTTACCTTTTTCTTTACCCCTTTACTCTGCAA TGTTGTAAAATTTCCAATGATGAGAGACAGCACAATAAATGTACCTTATCTCCTTAGGCTGAAGGCCATAACTAC ATAGTGGAGTAATTTAAGAACTCTCTTGCCTTCACCAACCCAAAAGGTTGCTTTTTGATAGCAACTGGCTAATGA ATTTTTAAAAAGAGAAAAAATACTAGTTTTCCCCTCTTTTGGGAAATAGAFTTTAAATGGCTAAACTACTAGC CTTAAAACTACTAGTCTAATAAAATCAACTACCACTTTTGTGAATCTGACAGGCCACATTTTTATATGGCCCTTT ACAGAATGGAGTGTTTGAACAGGATACTAACGCCATTGAGTTGAGCTGGCCTAGCGATGGAGGGACACTCTAAC TTCTGGGAAACAAGCTTACATAGTCTTTTTTAAAATGCACAAAGCCTCCCAGCTAAGAGGTCACTTGGTTTGGGC TTCATTAGGACTGAGACTTTGTTGAGTTCTTTCTGGGACTTGGAGAGTGGATGATATTCAGGCTCTGAACATTCC CAGCGCTCTCCCGAGGGTGCCACTTTCTCAAGATGAAAAACTGTGACTGAAAAAATTAATAATAATGTTTCTGAG TGGCTCCAATTTTAGAGAACTTGAAAGCAAGGCTTTGGACAAAATTTTGAGACCCTAATCACTTTACCTTCCTCC ATAAACTCTTACTCAAATGATTTGAACTTT

PCT/US2003/028547

FIGURE 1293

MPHKVANRISDPNLPPRSESFSISGVQPARTPPMLRPVDPQIPHLVAVKSQGPALTASQSVHEQPTKGLSGFQEA
LNVTSHRVEMPRQNSDPTSENPPLPTRIEKFDRSSWLRQEEDIPPKVPQRTTSISPALARKNSPGNGSALGPRLG
SQPIRASNPDLRRTEPILESPLQRTSSGSSSSSSTPSSQPSSQGSQPGSQAGSSERTRVRANSKSEGSPVLPHE
PAKVKPEESRDITRPSRPASYKKAIDEDLTALAKELRELRIEETNRPMKKVTDYSSSSEESESSEEEEEDGESET
HDGTVAVSDIPRLIPTGAPGSNEQYNVGMVGTHGLETSHADSFSGSISREGTLMIRETSGEKKRSGHSDSNGFAG
HINLPDLVQQSHSPAGTPTEGLGRVSTHSQEMDSGTEYGMGSSTKASFTPFVDPRVYQTSPTDEDEEDEESSAAA
LFTSELLRQEQAKLNEARKISVVNVNPTNIRPHSDTPEIRKYKKRFNSEILCAALWGVNLLVGTENGLMLLDRSG
QGKVYNLINRRRFQQMDVLEGLNVLVTISGKKNKLRVYYLSWLRNRILHNDPEVEKKQGWITVGDLEGCIHYKVV
KYERIKFLVIALKNAVEIYAWAPKPYHKFMAFKSFADLQHKPLLVDLTVEEGQRLKVIFGSHTGFHVIDVDSGNS
YDIYIPSHIQGNITPHAIVILPKTDGMEMLVCYEDEGVYVNTYGRITKDVVLQWGEMPTSVAYIHSNQIMGWGEK
AIEIRSVETGHLDGVFMHKRAQRLKFLCERNDKVFFASVRSGGSSQVFFMTLNRNSMMNW

PCT/US2003/028547

1392/6881 FIGURE 1294

PCT/US2003/028547

1393/6881 FIGURE 1295

PCT/US2003/028547

FIGURE 1296

TATTTTGTCAGATGTGTTGAACCTCGATTAAGATTGCATTATGACATTCTTGAAGACCGAGTTCCATCAGGACTT ATTGTTGACTACCACAATCTGTTGTCTCAATGTGAGGAGGTTACAGGAAATTTTTAAATCTGAGAAGCAGTTTG TCAAATTGTAACTCTGATTCCGAGCAGGAAAATATCTCCATGGTGGAAGGGTTAAAATTGTATTCGGAGATGGAA CAGTTGAAACAAAAGCTGAAACTCATTGAGAATCCTTTGTTGAGGTATGTGTTTTGGTTATCAGAAGAATTCTAAC ATCCAAGCAAAGGGTGTCCGTTCCAGCGGTCAGAAGATCACTCATGTGGTCTCCTCCACCATGATGGCTGGTCTC CTGCGGTCCCTGCTTACGGACAGGCTTTGCCAGGAGCCTGGTGAGGAAAAAGAGAAAATTCAGTTCCATAGTGAT ACTTTCTCCATTGCTGACTCCATTGAGTTGGAAGGATATGGCCTACCAGATGACATTGTGATAGAAAAGAGGGGC AAAGGCGACACTTTTGTGGACTGCACTGGTGCTGATATTAAAATCTCAGGCATAAAATTTGTTCAGCATGATGCT GTAGAGGGAATCTTAATTGTTCACCGTGGTAAGACTACGCTGGAAAACTGTGTGCTGCAGTGTGAGACGACCGGA GTCACAGTGCGGACATCAGCAGAGTTTCTAATGAAGAACTCGGATTTATATGGCGCCCAAGGGTGCTGGTATAGAA TTCTTAGATGAACATTATGACATTCCCAAGATATCCATGGTGAATAATAATAATAATAATAATAATAATGAAGGTTATGGT GTTGTCTTGGTGAAACCTACAATCTTCTCTGACCTGCAAGAAAATGCTGAAGATGGAACTGAAGAAAATAAAGCG CTTAAAATTCAGACAAGTGGAGAGCCAGATGTGGCTGAAAGAGTGGATCTAGAAGAGCTGATTGAGTGTGCAACT GGTAAAATGGAGCTTTGTGCAAGAACTGACCCTTCTGAGCAAGTCGAGGGAAATTGTGAAATTGTAAATGAACTA ATTGCTGCCTCCACACAGAAAGGCCAGATAAAGAAGAAAAGGTTGAGTGAACTGGGGGATCACGCAAGCTGATGAC AACTTAATGTCACAGGAGATGTTTGTTGGGATTGTGGGGAACCAGTTCAAGTGGAATGGGAAAGGTAGTTTTGGC ACATTTCTTTTCTGACTACAGTGATGTAAGTAGATAGCAAAATACTGGATTTTGCACATGCTGCCCTAAGAATCA CTGCTGCCATTGTAGTTTGCTGTATTGTCTGTATTTTATATTTGATTATTTTGGGCTTGAGTGAAAGGTAGATTTA TTTCCATTTGCAGGTGTTGCACATAAAACACTCCCTCTTTATAAGAAAAATCATAAAATGCATATAAAATAGAAAA TATTTGGAGATTGCTTATCTGAAAGTCTTGCTTTCTTATACACATGGTTCTCTCATATTAAGCCTGGTAGTAACT CAATAGGTGTCATATGTACAGCATTCTTCTTAGAGTTGCCTTTTCATCCCAATTACAGTGAGTCTGATTTCCATC CTGTATTTGCATAATACTTGTCTTAAAATAAAAGCTTTTATGATTGGGAATTTATCTGCCTAATCAGACTTATTA TTGAGACGTCAATGGGACGCATTTTTCTGTTGAGCTATGCAGTCGTCAAAACAGCGATAGACAGCATAGGAGGTT TGAAGCAGAAATGAAATGTGTTATTCAGAGCCAATGTTGTACATAGAGCATTTTCACTATTGCTGAATGGGAATG ATTAAAAACAAGGTATTTTTCGGGCCAGGCGGTGGCTCACGCTTGTAATCGCAGCACTTTGGGAGGCTGAGGCAG TTAAAAAAAATTAGCTGAGTGTGGTGCATGCATGTAGTTCCAGCTACTCAGGAGGCTGAGGCTAGAGGATCC TTGAGCCCAGGAGGTTGAGGCTGCAGTGAGGTGTGATTGCGCCACTGCATTCCAGCTTGGGCGACAGAGCGAGAC CCAGTCTCAAAAAAAAAAAAAAAGTATTTTCTCTTACCGTTACAGTATTCTGATTATTACTGACACAGTCAAA ATGATTAACTGTACAACCTGTATCTGCTGGGTGTTCTTGTTATCATATTGTAAAAACAGCTTTAAAAATATTTATA TTTTAAAAACTGTATGTGACATTAATATGCCTAATGATTAAAATTATAGTGATGAAATAACAAAA

PCT/US2003/028547

FIGURE 1297

PCT/US2003/028547

1396/6881 FIGURE 1298

MAAMSLLRRVSVTAVAALSGRPLGTRLGFGGFLTRGFPKAAAPVRHSGDHGKRLFVIRPSRFYDRRFLKLLRFYI ALTGIPVAIFITLVNVFIGQAELAEIPEGYVPEHWEYYKHPISRWIARNFYDSPEKIYERTMAVLQIEAEKAELR VKELEVRKLMHVRGDGPWYYYETIDKELIDHSPKATPDN

PCT/US2003/028547

1397/6881 FIGURE 1299

GTTTTGCCAGTTATGCGAAAACATGGCTGCGGCCGGTTTGGCCCTTCTTTGTAGGAGAGTTTCATCCGCCCTGAA ACCAAATGTGACATCCTTTCACCAATATAGATTACTTCATACCACATTGTCAAGGAAAGGACTAGAAGAATTTTT TGATGACCCAAAAAACTGGGGGCAAGAAAAAGTAAAATCTGGAGCAGCATGGACCTGTCAGCAACTAAGGAACAA GGCCAAGCGGCAGAGTTGCCAATGCCAAGTCCAGAGCGGTTAGATAAGGTAGTAGATTCCATGGATGCATTAGA ATACAATAGGAAACGATTCTTTGCCTTGCCTTATGTGGACCATTTTCTCAGACTGGAACGTGAGAAACGAGCCCG CATCAAAGCACGGAAGGAAAATTTAGAGAGAAAGAAAGCAAAAATTCTTTTAAAAAAGTTTCCACATCTTGCTGA AGCCCAAAAGTCAAGTCTTGTCTAAGATGTCTGAACTATTAAATTTACCATTTTGTTTTTCTTGAATAGTCTGTG TACAGGAGTAAATATGTTAAGTGGTTTATAAAGAAATTCTGTTTTTAGTCAAGTGACTTTACTAATCAGTTGTTC TAAGTGTGAATATGGCATGCTAATTAGCTAATTTGGTAGAAGCTAATTTGCTTCTAAAAATCAGGTATAAAGTTC AGATGAGATTCCCACTTTATAAATTCTGACATTTAAGCAGGCTTTAAATGTCACCTGCTACCTTAGAGTGTGAAG GTGATGGTAACTGCCACAGCAAAGGCAATACCGTAGTTTTTGAATTTGAATAATAGTTTTACCTCTGTTGTTAAT AGGCTATGAAGAGGATGTGGGTATTGCTGTTAATAAACGGAGGACTTTGATTCAAAATAATGAGAAATACATTTA TAAGCCTAAGGTAAAAAGCATAGGCAGTAACTTTTACTAGTCAATAAAAAGCAGTTCTACCAATCCACTGGTAAT TAATACACTAAACAGAGTTGGAAAGCATTTTACTGAAAGCAAAATATTTAGAGAAAATAGACATTTATACAAAAT TATAAAATGCTTGTAATAAGAATAAGTGCATTTCAAGGAAAGCACACACTTAATTTATAGAGCCAGTTAAAGCTT TAAAAAATTTAAGTGGAAATTGAAATATGCAAAAATGTATAAACATTCTACAAAAGATGGTCATTCTTTTCCTGA GACTGACTCCTAACATTGTGTTTCCTGATAACCCCTTTACATTGGAAGGGTCAAATAATCCTTCTGGAATCTTTA GCCGCTCTGCACCAAAATCACAATTGTAGCCATTGGGGAATTCATAATGAACAGTTGGCATCTGTGCAGCCACTT GTTCATCATAAGTTGAATCTGACACTTGAAGTACCGAAGCTTGAAAATCCTGGATAACACAATTACACATATAAT TGTGCCAAGACCTCGTAACCTGAGGCAACTTCTCTTTTCTTTTCCAGTTTGCTGGAGATCCTTCACGAACAGCTT CTTTTGATGCAATCATATATGGAGGAACCAATTCAATATTCATTTCTTGGAAGAGTTCTCTGCACTGCATAGTAA TAAAGTCTCCAGCAAGAGGGGATTTCACAATGCCTTGTTGAAGGACATAGCCATCGTGGACTGGAATTGCAGTGG TATGAGTGGCTCCACTGTCCAAAATCAGCCCAGTAGAACGACCATTAGCAAATGCTGTCAAAACTGCAGTTTTGC ACGGTGCCTCTGACATGAGAACAGGATGGAGACTGGCTTCTGATTTGACATGCATTTTGTAGGTATGATCCAAAA TAGCTTGGAAACTATCCCAGTCTTCAACCATCCCATTTTTTAGAGGTGAAATGGCCTCCATATTCTCCCTCGGAA CACGCAGAGCATTAGTATCTATGTAGTAGGTGGGACCGCCTTGTTTGCCTTTATCGCCATCTATTTCCATTAATG TGCTTCCGTCATCTCTTTCTACCACCATACCAATAGCTGTAGGAAAATCCACCTTGGGGCAGTCCTCACCAGCAT AACCAGCTCTCACAGTATAGGATCCAATGTCAAAAACAAGGGCTCCAACTTCACCTCCCCCGTACACGCCGCCGC TCATGGCTGCCGGCGGCGACTCCTACCCTAAGGGCTAACTGGCGAAGTGACTGCAGTGGCCGCGACTGCGAGT CTCGAGGAGCGATAGCCCCTGACTCCCTTAACTTCCACCGCCACCTCAGGCAACAAAGCGG

PCT/US2003/028547

FIGURE 1300

CCGCTTTGTTGCCTGAGGTGGCGGTGGAAGTTAAGGGAGTCAGGGGCTATCGCTCCTCGAGACTCGCAGTC GCGGCCACTGCAGTCACTTCGCCAGTTAGCCCTTAGGGTAGGAGTCGCGCCGGCAGCAGCCATCAGCGGCGGCGT GTACGGGGGAGATGAAGTTGGAGCCCTTGTTTTTGACATTGGATCCTATACTGTGAGAGCTGGTTATGCTGGTGA GGACTGCCCCAAGGTGGATTTTCCTACAGCTATTGGTATGGTGGTAGAAAGAGATGACGGAAGCACATTAATGGA AATAGATGGCGATAAAGGCAAACAAGGCGGTCCCACCTACTACATAGATACTAATGCTCTGCGTGTTCCGAGGGA GAATATGGAGGCCATTTCACCTCTAAAAAATGGGATGGTTGAAGACTGGGATAGTTTCCAAGCTATTTTGGATCA TACCTACAAAATGCATGTCAAATCAGAAGCCAGTCTCCATCCTGTTCTCATGTCAGAGGCACCGTGGAATACTAG AGTTTTGACAGCATTTGCTAATGGTCGTTCTACTGGGCTGATTTTGGACAGTGGAGCCACTCATACCACTGCAAT TCCAGTCCACGATGGCTATGTCCTTCAACAAGGCATTGTGAAATCCCCTCTTGCTGGAGACTTTATTACTATGCA GTGCAGAGAACTCTTCCAAGAAATGAATATTGAATTGGTTCCTCCATATATGATTGCATCAAAAGAAGCTGTTCG TGAAGGATCTCCAGCAAACTGGAAAAGAAAAGAGAGTTGCCTCAGGTTACGAGGTCTTGGCACAATTATATGTG TAATTGTGTTATCCAGGATTTTCAAGCTTCGGTACTTCAAGTGTCAGATTCAACTTATGATGAACAAGTGGCTGC ACAGATGCCAACTGTTCATTATGAATTCCCCAATGGCTACAATTGTGATTTTGGTGCAGAGCGGCTAAAGATTCC CACAAGTGTTGGGATGTGATATTGACATCAGACCAGGTCTCTATGGCAGTGTAATAGTGGCAGGAGGAAACAC ACTAATACAGAGTTTTACTGACAGGTTGAATAGAGAGCTGTCTCAGAAAACTCCTCCAAGTATGCGGTTGAAATT GATTGCAAATAATACAACAGTGGAACGGAGGTTTAGCTCATGGATTGGCGGCTCCATTCTAGCCTCTTTGGGTAC AGAAAGAGTTCCCAAGCTTCTACCTTCCTTTTGTCACCTTACGTTTCATAGCTTTAGTATACTCAGGAAAAGAAT GACCATCTTTTGTAGAATGTTTATACATTTTTGCATATTTCAATTTCCACTTAAATTTTTAAAGCTTTAACTGG CTCTATAAATTAAGTTTGTGCTTTCCTTGAAATGCACTTATTCTTATTACAAGCATTTTATAATTTTGTATAAAT TGGTAGAACTGCTTTTTATTGACTAGTAAAAGTTACTGCCTATGCTTTTTACCTTAGGCTTACAGAATTAAATAA AAATTAGCCATTCCAGAAATAT

PCT/US2003/028547

1399/6881 FIGURE 1301

MSGGVYGGDEVGALVFDIGSYTVRAGYAGEDCPKVDFPTAIGMVVERDDGSTLMEIDGDKGKQGGPTYYIDTNAL RVPRENMEAISPLKNGMVEDWDSFQAILDHTYKMHVKSEASLHPVLMSEAPWNTRAKREKLTELMFEHYNIPAFF LCKTAVLTAFANGRSTGLILDSGATHTTAIPVHDGYVLQQGIVKSPLAGDFITMQCRELFQEMNIELVPPYMIAS KEAVREGSPANWKRKEKLPQVTRSWHNYMCNCVIQDFQASVLQVSDSTYDEQVAAQMPTVHYEFPNGYNCDFGAE RLKIPEGLFDPSNVKGLSGNTMLGVSHVVTTSVGMCDIDIRPGLYGSVIVAGGNTLIQSFTDRLNRELSQKTPPS MRLKLIANNTTVERRFSSWIGGSILASLGTFQQMWISKQEYEEGGKQCVERKCP

PCT/US2003/028547

1400/6881 FIGURE 1302A

AGAGTACGTGTTTACAGATAAAACTGGTACACTGACAGAAAATGAGATCCAGTTTCGGGAATGTTCAATTAATGG CATGAAATACCAAGAAATTAATGGTAGACTTGTACCCGAAGGACCAACACCAGACTCTTCAGAAGGAAACTTATC TTATCTTAGTAGTTTATCCCATCTTAACAACTTATCCCATCTTACAACCAGTTCCTCTTTCAGAACCAGTCCTGA CAATGTTCAAACTGACTGCACTGGTGATGGTCCCTGGCAATCCAACCTGGCACCATCGCAGTTGGAGTACTATGC ATCTTCACCAGATGAAAAGGCTCTAGTAGAAGCTGCTGCAAGGATTGGTATTGTGTTTATTGGCAATTCTGAAGA AACTATGGAGGTTAAAACTCTTGGAAAACTGGAACGGTACAAACTGCTTCATATTCTGGAATTTGATTCAGATCG TAGGAGAATGAGTGTAATTGTTCAGGCACCTTCAGGTGAGAAGTTATTATTTGCTAAAGGAGCTGAGTCATCAAT TCTCCCTAAATGTATAGGTGGAGAAATAGAAAAAACCAGAATTCATGTAGATGAATTTGCTTTGAAAGGGCTAAG **AACTCTGTGTATAGCATATAGAAAATTTACATCAAAAGAGTATGAGGAAATAGATAAACGCATATTTGAAGCCAG** GACTGCCTTGCAGCAGCGGGAAGAGAAATTGGCAGCTGTTTTCCAGTTCATAGAGAAAGACCTGATATTACTTGG AGCCACAGCAGTAGAAGACAGACTACAAGATAAAGTTCGAGAAACTATTGAAGCATTGAGAATGGCTGGTATCAA AGTATGGGTACTTACTGGGGATAAACATGAAACAGCTGTTAGTGTGAGTTTATCATGTGGCCATTTTCATAGAAC CATGAACATCCTTGAACTTATAAACCAGAAATCAGACAGCGAGTGTGCTGAACAATTGAGGCAGCTTGCCAGAAG AATTACAGAGGATCATGTGATTCAGCATGGGCTGGTAGTGGATGGGACCAGCCTATCTCTTGCACTCAGGGAGCA TGAAAAACTATTTATGGAAGTTTGCAGAAATTGTTCAGCTGTATTATGCTGTCGTATGGCTCCACTGCAGAAAGC AAAAGTAATAAGACTAATAAAAATATCACCTGAGAAACCTATAACATTGGCTGTTGGTGATGGTGCTAATGACGT AAGCATGATACAAGAAGCCCATGTTGGCATAGGAATCATGGGTAAAGAAGAAGAAGACAGGCTGCAAGAAACAGTGA CTATGCAATAGCCAGATTTAAGTTCCTCTCCAAATTGCTTTTTGTTCATGGTCATTTTTATTATATTAGAATAGC TACCCTTGTACAGTATTTTTTTTATAAGAATGTGTGCTTTATCACACCCCAGTTTTTATATCAGTTCTACTGTTT GATATATAGTCTTTTGGAACAGCATGTAGACCCTCATGTGTTACAAAATAAGCCCACCCTTTATCGAGACATTAG TAAAAACCGCCTCTTAAGTATTAAAACATTTCTTTATTGGACCATCCTGGGCTTCAGTCATGCCTTTATTTTCTT TTTTGGATCCTATTTACTAATAGGGAAAGATACATCTCTGCTTGGAAATGGCCAGATGTTTGGAAACTGGACATT TGGCACTTTGGTCTTCACAGTCATGGTTATTACAGTCACAGTAAAGATGGCTCTGGAAACTCATTTTTGGACTTG GATCAACCATCTCGTTACCTGGGGATCTATTATATTTTATTTTGTATTTTCCTTGTTTTATGGAGGGATTCTCTG GCCATTTTTGGGCTCCCAGAATATGTATTTTGTGTTTATTCAGCTCCTGTCAAGTGGTTCTGCTTGGTTTGCCAT AATCCTCATGGTTGTTACATGTCTATTTCTTGATATCATAAAGAAGGTCTTTGACCGACACCTCCACCCTACAAG TACTGAAAAGGCACAGCTTACTGAAACAAATGCAGGTATCAAGTGCTTGGACTCCATGTGCTGTTTCCCGGAAGG AGAAGCAGCGTGTGCATCTGTTGGAAGAATGCTGGAACGAGTTATAGGAAGATGTAGTCCAACCCACATCAGCAG ATCATGGAGTGCATCGGATCCTTTCTATACCAACGACAGGAGCATCTTGACTCTCCACAATGGACTCATCTAC TTGTTAAAGGGGCAGTAGTACTTTGTGGGAGCCAGTTCACCTCCTTTCCTAAAATTCAGTGTGATCACCCTGTTA ATGGCCACACTAGCTCTGAAATTAATTTCCAAAATCTTTGTAGTAGTTCATACCCACTCAGAGTTATAATGGCAA ACAAACAGAAAGCATTAGTACAAGCCCCTCCCAACACCCTTAATTTGAATCTGAACATGTTAAAATTTGAGAATA AAGAGACATTTTTCATCTCTTTGTCTGGTTTGTCCCTTGTGCTTATGGGACTCCTAATGGCATTTCAGTCTGTTG CTGAGGCCATTATATTTTAATATAAATGTAGAAAAAAGAGAGAAATCTTAGTAAAGAGTATTTTTTAGTATTAGC TTGATTATTGACTCTTCTATTTAAATCTGCTTCTGTAAATTATGCTGAAAGTTTGCCTTGAGAACTCTATTTTTT TATTAGAGTTATATTTAAAGCTTTTCATGGGAAAAGTTAATGTGAATACTGAGGAATTTTGGTCCCTCAGTGACC TGTGTTGTTAATTCATTAATGCATTCTGAGTTCACAGAGCAAATTAGGAGAATCATTTCCAACCATTATTTACTG CAGTATGGGGAGTAAATTTATACCAATTCCTCTAACTGTACTGTAACACAGCCTGTAAAGTTAGCCATATAAATG CAAGGGTATATCATATACAAATCAGGAATCAGGTCCGTTCACCGAACTTCAAATTGATGTTTACTAATATTTT TGTGACAGAGTATAAAGACCCTATAGTGGGTAAATTAGATACTATTAGCATATTATTAATTTAATGTCTTTATCA TTGGATCTTTTGCATGCTTTAATCTGGTTAACATATTTAAATTTGCTTTTTTCTCTTTACCTGAAGGCTCTGTG TATAGTATTTCATGACATCGTTGTACAGTTTAACTATATCAATAAAAAGTTTGGACAGTATTTAAATATTGCAAA TATGTTTAATTATACAAATCAGAATAGTATGGGTAATTAAATGAATACAAAAAGAAGAGCCTCTTTCTGCAGCCG ACTTAGACATGCTCTTCCCTTTCTATAAGCTAGATTTTAGAATAAAGGGTTTCAGTTAATAATCTTATTTTCAGG TTATGTCATCTAACTTATAGCAAACTACCACAATACAGTGAGTTCTGCCAGTGTCCCAGTACAAGGCATATTTCA GGTGTGGCTGTGGAATGTAAAAATGCTCAACTTGTATCAGGTAATGTTAGCAATAAATTAAATGCTAAGAATGAT

PCT/US2003/028547

FIGURE 1302B

TAATCGGGTACATGTTACTGTAATTAACTCATTGCACTTCAAAACCTAACTTCCATCCTGAATTTATCAAGTAGT TCAGTATTGTCATTTGTTTTTGTTTTATTGAAAAGTAATGTTGTCTTAAGATTTAGAAGTGATTATTAGCTTGAG **AACTATTACCCAGCTCTAAGCAAATAATGATTGTATACATATTAAGATAATGGTTAAATGCGGTTTTACCAAGTT** GGCTTCTAGAATTGGACTGGCAGGGGAAAGAATGGTAGAGACAGAAATTAAGACTTTATCCTTGTTTGCTTGTAA ACTATTATTTCTTGCTAATGTAACATTTGTCTGTTCCAGTGATGTAAGGATATTAAGTTATTAAGCTAAATATT AATTTTCAAAAATAGTCCTTCTTTAACTTAGATATTTCATAGCTGGATTTAGGAAGATCTGTTATTCTGGAAGTA CTAAAAAGAATAATACAACGTACAATGTCTGCATTCACTAATTCATGTTCCAGAAGAGGAAATAATGAAGATATA CTCAGTAGAGTACTAGGTGGGAGGATATGGAAATTTGCTCATAAAATCTCTTATAAAACGTGCATATAACAAAAT GACACCCAGTAGGCCTGCATTACATTTACATGACCGTGTTTATTTGCCATCAAATAAACTGAGTACTGACACCAG ACAAAGACTCCAAAGTCATAAAATAGCCTATGACCAACTGCAGCAAGACAGGAGGTCAGCTCGCCTATAATGGTG AAGTAAATGGCAACCACTAGTGTGCTCATCCTGAACTGTTACTCCAAATCCACTCCGTTTTTAAAGCAAAATTAT CTTGTGATTTTAAGAAAAGAGTTTTCTATTTATTTAAGAAAGTAACAATGCAGTCTGCAAGCTTTCAGTAGTTTT CTAGTGCTATATTCATCCTGTAAAACTCTTACTACGTAACCAGTAATCACAAGGAAAGTGTCCCCTTTGCATATT TCTTTAAAATTCTTTCTTTGGAAAGTATGATGTTGATAATTAACTTACCCTTATCTGCCAAAACCAGAGCAAAAT GCTAAATACGTTATTGCTAATCAGTGGTCTCAAATCGATTTGCCTCCCTTTGCCTCGTCTGAGGGCTGTAAGCCT GAAGATAGTGGCAAGCACCAAGTCAGTTTCCAAAATTGCCCCTCAGCTGCTTTAAGTGACTCAGCACCCTGCCTC AGCTTCAGCAGGCGTAGGCTCACCCTGGGCGGAGCAAAGTATGGGCCAGGGAGAACTACAGCTACGAAGACCTGC ATACACAAAGGCTTCCAGACCTGAGCCACACCCAGGCCCTATCCTGAACAGGAGACTAAACAGAGGCAAATCAAC CCTAGGAAATACTTGCATTCTGCCCTACGGTTAGTACCAGGACTGAGGTCATTTCTACTGGAAAAGATTGTGAGA TTGAACTTATCTGATCGCTTGAGACTCCTAATAGGCAGGAGTCAAGGCCACTAGAAAATTGACAGTTAAGAGCCA AAAGTTTTTAAAATATGCTACTCTGAAAAATCTCGTGAAGGCTGTAGGAAAAGGGAGAATCTTCCATGTTGGTGT TTTTCCTGTAAAGATCAGTTTGGGGTATGATATAAGCAGGTATTAATAAAAATAACACACCAAAGAGTTACGTAA AACATGTTTTATTAATTTTGGTCCCCACGTACAGACATTTTATTTCTATTTTGAAATGAGTTATCTATTTTCATA AAAGTAAAACACTATTAAAGTGCTGTTTTATGTGAAATAACTTGAATGTTGTTCCTATAAAAAATAGATCATAAC TCATGATATGTTTGTAATCATGGTAATTTAGATTTTTATGAGGAATGAGTATCTGGAAATATTTGTAGCAATACTT GGTTTAAAATTTTGGACCTGAGACACTGTGGCTGTCTAATGTAATCCTTTAAAAATTCTCTGCATTGTCAGTAAA TGTAGTATATTATTGTACAGCTACTCATAATTTTTTAAAGTTTATGAAGTTATATTTATCAAATAAAACTTTCC TATAT

PCT/US2003/028547

1402/6881 FIGURE 1303

MQFRECSINGMKYQEINGRLVPEGPTPDSSEGNLSYLSSLSHLNNLSHLTTSSSFRTSPENETELIKEHDLFFKA VSLCHTVQISNVQTDCTGDGPWQSNLAPSQLEYYASSPDEKALVEAAARIGIVFIGNSEETMEVKTLGKLERYKL LHILEFDSDRRRMSVIVQAPSGEKLLFAKGAESSILPKCIGGEIEKTRIHVDEFALKGLRTLCIAYRKFTSKEYE EIDKRIFEARTALQQREEKLAAVFQFIEKDLILLGATAVEDRLQDKVRETIEALRMAGIKVWVLTGDKHETAVSV SLSCGHFHRTMNILELINQKSDSECAEQLRQLARRITEDHVIQHGLVVDGTSLSLALREHEKLFMEVCRNCSAVL CCRMAPLQKAKVIRLIKISPEKPITLAVGDGANDVSMIQEAHVGIGIMGKEGRQAARNSDYAIARFKFLSKLLFV HGHFYYIRIATLVQYFFYKNVCFITPQFLYQFYCLFSQQTLYDSVYLTLYNICFTSLPILIYSLLEQHVDPHVLQ NKPTLYRDISKNRLLSIKTFLYWTILGFSHAFIFFFGSYLLIGKDTSLLGNGQMFGNWTFGTLVFTVMVITVTVK MALETHFWTWINHLVTWGSIIFYFVFSLFYGGILWPFLGSQNMYFVFIQLLSSGSAWFAIILMVVTCLFLDIIKK VFDRHLHPTSTEKAQLTETNAGIKCLDSMCCFPEGEAACASVGRMLERVIGRCSPTHISRSWSASDPFYTNDRSILTLSTMDSSTC

PCT/US2003/028547

1403/6881 FIGURE 1304

TTTAGCAGTCTGTGATGATCAGCAAAAAAGCACATAAAGTAAAAATTAGTTGACCATGCTAAATTCAATTCTGGA ATTTTTTTTTTTTTTGGGCATTTCTAGAACTTTTTACATTTGAAAGTACATGAGTATTAGTAACGATGACTTA TGTATAATCAGAATCTTTATGACAATTTAGTTTTACAAGGTCAGAAGAGATGAGTTTGCTAAACCCAGCTGTGAT TCATTTTCTGTTTTTCCTCTATGTGAGTCAGCTACAAAAGTGGTCTAATTTTTACAACAGTAGAACTTCCTCCTT TTCTACTGTAATCTTCCCACTGACTTTACTGCACAGGTATGAAATACTAGTGTATTGGATCTTCAGTAACCTTTT TATTTCCTAGATGATTGAAATATAGGTATTTACTCCATTTAAACCAGGTGATAAGATGATGTAAATACTCAGGGA GGGTATTAACTTGTTACTTTTGCTCGTTTGGGGTGTAAAGTGCCATGACTGAATAATCTTCAATTCATGATTCTA GAGTAAGTTTAATTTGGAAAAAGGGGCTTCACACATGGTGGTGGTTGAACATTGATTCTTTTATACTTAAAAAAGA TGAAAATGTTTTGTGGACTGATACATTTTATCTTACTGAATATGAATTGTTTATGTATCTTACTGAAATAGC CTCCTGTTGTCTGGATATGGCAATAGATTTTTTAAATTGCTGTGAGAACCCATATATGAAAAGAGAGGTTGAA TTGTGTGTGCCTTTTATGTCTTGAGATTTATATGTGGAAAAGACGACATCTACTTCAAACTGTATTTTTTTCGTT TTTTTTTTTTTTGGGGAAGGGGGGAACGGGGTCTTGCTCTGTCGCCCAGGCTGGAGTGCAGTGGCGCGATCT CGTGCCACCACCCGGCTAATTTTTTGTATTTTTAGTAGAGACGGGGTTTAGTAGAGACGGATCACTCCTGAC CACGTGATCCGCCCACCTCGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCACCACCCCCGGCCTGTATTTT CAGAGAGGAGAGCTTGGTGTTTTTGTGGTGCCAAGTGGTAAGATAATGTCTCTTTGAGGCTTCCTATGGACTGCC TTTATTTTAGTAAACTCAAGACACCAGTTAACCTCAACAGAGTTTTGGCCTTATTAGAATTTGTTGTGCATCTTA GCACCAGAAACCATTTGAGCCAGGAGTGTGAATGAATAATTCCAGAGACACTTTAGACATTTTTTAATGTTTTAT ATGAACATTTTACATTTGTGTGATTGCCTTAGATATTAAATTTTCCTAGTGCTGATAAAAACAGCAACATTCATA ACTTATTTTATATATTGTTCCAAAGAAAGAATTTGTTTTAATGGTTTCAAAATAACTGCACCTGAATTTGTTTA TGTGCCTTAAGTTCTCTAGTGCTATTTCAACTTTTTTTCAATCTAAATGAAGCTTACCTTAGATAAGGTTCATA TTTGTTTCCTATAGAGTAAATAAACTTCCCCTTCTTAAATTGTGTAATAAGCACCAACGTGTGGTTGCTTGGCAG GTGCTTTTTAAAATATTCAGACAAATATCTATCTTACATTGATTAAACCCGTGTAAATTCATTTGCAGTATCTAC ATCGAATGTCAAAAAAGTATACTTATTTTTGTTCCATACTTATGTACAATTTTTTCCCTCTTCAGGCTTTTTCAT TTGAGAGTTGTTGGAGCTCTAAGACAATACAAATTTAGAGTTGAACAAAAGTATAATCTGCTTTACAACTAGTAT AGACCTAAGGTCATTTGCTTTCAATTAGAGGCTCCAGAGTCTTCATAGTGGAAAGAATGCTTTGTATTTAATTGT TCTTAGTTAAGTTGTAGCACGTGAATACTTACTTACATGTTTTGTTTAAATATACTTCTTGCATAGTTTAAATTTT TTAAAAGTTGTATCTAATAAAATGTCTTTTAACCATTATTACTTGACTATATGGTTGTATTAAATTTTGTTTACG

PCT/US2003/028547

FIGURE 1305

 ${\tt MYLYCQIAFLKLRKDKGSITPLLSISKPGIFFFSCCLDMAIDFLNCCENPYMKREELNCVCLLCLEIYMWKRRHLLQTVFFSFFFFGEGGRTGSCSVAQAGVQWRDLS}$

PCT/US2003/028547

1405/6881 FIGURE 1306

GTCTGGAATCAAGCGAACCATCAAAGAAACCGACCCTGATTACGAGGATGTATCTGTGGCCCTTCCAAATAAGCG GCATAAAGCAATTGAGAATTCAGCTCGAGATGCTGCTGCAGAAGATTGAGACTATTATCAAAGAACAGTTTGC TCTTGAA<u>ATG</u>AAGAATAAGGAACATGAAATTGAAGTCATTGACCAGCGACTGATTGAAGCAAGAAGGATGATGGA TAAACTGCGTGCCTGCATTGTAGCAAACTACTATGCTTCTGCAGGTCTTCTAAAAGTTTCTGAGGGATCAAAGAC ATGTGATACGATGGTTTTTAATCATCCTGCTATCAAGAAATTTTTGGAATCACCATCTAGGTCATCATCTCCTGC CAATCAGAGAGCAGAAACACCATCAGCCAATCATTCAGAAAGTGATTCTTTATCTCAGCACAATGACTTCTTATC TGACAAAGATAATAACAGCAATATGGATATAGAGGAAAGACTCTCAAACAACATGGAGCAGAGACCAAGCCGAAA TACTGGAAGGGATACTTCTAGAATTACTGGCTCCCATAAAACAGAACAGCGGAATGCTGATCTCACAGATGAGAC TTCACGACTTTTTGTAAAGAAAACAATAGTAGTGGGCAATGTGTCCAAGTATATACCTCCGGATAAGAGGGAAGA AAATGACCAGTCAACTCATAAGTGGATGGTATATGTCCGAGGGTCCCGTAGAGAACCCAGCATTAATCATTTTGT CAAGAAGGTTTGGTTCTTCCTTCATCCTAGCTATAAACCAAATGACCTTGTGGAAGTTAGAGAGCCTCCTTTTCA CAGCGTAAACACATCTGGAGGGGTGCAGACGATCCTGATGCCTGTGAATAAAGTGGTTCAGTCATTTTCTACCAG CAAGCCACCTGCCATTCTGCCTGTAGCTGCCCCAACTCCAGTTGTCCCCAGCTCTGCTCCAGCAGCTGTTGCAAA AGTGAAGACTGAACCAGAAACACCTGGACCGAGTTGCCTCTCTCAGGAGGGTCAGACAGCAGTGAAAACAGAAGA ${\tt AAGA:} TCCATTAATCACTGCAAAAAGTGAAGATGCCAGCTGCTTTTCTGCAAAGTCTGTGGAGCAGTACTATGGC$ TGGAACATTGGAAAAAGGAGAGCCGCTGAGTGGCAAAGAGCAATGACAATGCGAAAAGTCTTACAAGAAATCCTG GAGAAGAATCCGAGATTTCACCACCTGACTCCCCTCAAAACCAAGCACATCGCTCACTGGTGCCGCTGTCATGGC TACACCCCACCGGACCCTGAGAGCCTGAGGAATGACGGGGACTCCATCGAGGACGTGCTGACCCAGATCGACAGC GAGCCCGAGTGCCCATCATCATCTCCTCTGCTGACAACCTCTGCCGCAAACTGGAGGACCTGCAACAGTTCCAG CCCTGGTGACAGAGGACCCCGTCTCAAAAATTGATTGATCAATTCAGCATCTGAGGGCTGCAAGTACAGAAGG AATCTATTCTCAGCAGGGCATAGGGCACGCACTGGCTTAACAGTTTAGTATATAAGGCTCAAATAGTCTATACCT GAACTGCTATAAGCAAGGTCGATAGGGAAGTGGATAGATTGCTTCAGCAAAGTGAACTGTGAGATCTCCAGGACA GAGGGAGAAAGATCTGATCCAAATGAGAACAGATTGGTTATTGCAGGTATCACAGCCTAAAGAAATTATCTTTTT GCAAAAGAAATATTAAATGATTTAGCAGTCTCCACGTGTGTTAATGTTTCAAACGTGTATCATAATGTGTATAAT TGTGTAACAAATTGTCTACAATAAATCTTTTGGTATTTGT

PCT/US2003/028547

1406/6881 FIGURE 1307

 $\label{thm:mkheievidqrliearrmmdklracivanyyasagllkvsegsktcdtmvfnhpaikkflespsrssspanq\\ Raetpsanhsesdslsqhndflsdkdnnsnmdieerlsnnmeqrpsrntgrdtsritgshkteqrnadltdetsr\\ lfvkktivvgnvskyippdkreendqsthkwmvyvrgsrrepsinhfvkkvwfflhpsykpndlvevreppfhlt\\ Rrgwgefpvrvqvhfkdsqlkplsvntsggvqtilmpvnkvvqsfstskppailpvaaptpvvpssapaavakvk\\ Tepetpgpsclsqegqtavkteesselgnyvikidhletiqqllt\\ \end{aligned}$

PCT/US2003/028547

FIGURE 1308

PCT/US2003/028547

1408/6881 FIGURE 1309

 ${\tt MSRALDVLQMKEEDVLKFLAAGTHLGGTNLDFQMDNTGQRAVLKFAAATGATQIVGRFTPGTFTSQTQAAFREPR\\ {\tt LLVVTDPRADHQPLTETSYVNLPTIALCHTDFPLRYVDIAITCNNKGAPSVGPSWWMLALEVLRVCGTISLEHPW\\ {\tt EVMPDLYFYRDPEEIGKEEQVAAEKTVTKEEFQGKWTAPAPEFTAIQPEVGDWSDGVQVPSVPIHQVPTEDWSAQ\\ {\tt PATEDWSAAPTAQATEWVETTTEWS} \\$

PCT/US2003/028547

WO 2004/030615

1409/6881 FIGURE 1310

TGCGTGCGGTGGCAGCTTCCTTGCGGAAGTGGTGACCGTGAGAGAAGAAGATGCGCGCCCTGTAGTGGCGCCGC CTGGTGTGGTGGTTAGTCGGGCTAACAAGCGCAGCGGCGGCGGGGGCCGGGAGGCAGCGGTGGCGGGGAGCCAGAG GGGCGGAGGAGGAACCGCCGCCGCCCCTACAAGCAGTTCTGGTGGCCGATAGCTTCGATCGCCGCTTCTTCCCCA TCTCCAAGGACCAGCCTCGGGTCCTCTTGCCCCTGGCCAATGTGGCATTAATTGACTACACTCTGGAATTCCTGA CTGCCACAGGTGTACAGGAAACATTTGTCTTTTGTTGCTGGAAAGCTGCTCAAATCAAAGAACATTTACTGAAGT CAAAGTGGTGCCGCCCTACATCTCTCAATGTGGTTCGAATAATTACATCAGAGCTCTATCGATCACTGGGAGATG TCCTCCGTGATGTTGATGCCAAGGCTTTGGTGCGCTCTGACTTTCTTCTGGTGTATGGGGATGTCATCTCAAACA TCAATATCACCAGAGCCCTTGAGGAACACAGGTTGAGACGCGAAGCTAGAAAAAATGTTTCTGTGATGACGATGA TCTTCAAGGAGTCATCCCCCAGCCACCCAACTCGTTGCCACGAAGACAATGTGGTAGTGGCTGTGGATAGTACCA CAAACAGGGTTCTCCATTTTCAGAAGACCCAGGGTCTCCGGCGTTTTGCATTTCCTCTGAGCCTGTTTCAGGGCA GTAGTGATGGAGTGGAGGTTCGATATGATTTACTGGATTGTCATATCAGCATCTGTTCTCCTCAGGTGGCACAAC TCTTTACAGACAACTTTGACTACCAAACTCGAGATGACTTTGTGCGAGGTCTCTTAGTGAATGAGGAGATCCTAG GGAACCAGATCCACATGCACGTAACAGCTAAGGAATATGGTGCCCGTGTCTCCAACCTACACATGTACTCAGCTG TCTGTGCTGACGTCATCCGCCGATGGGTCTACCCTCTCACCCCAGAGGCGAACTTCACTGACAGCACCACCCAGA GCTGCACTCATTCCCGGCACAACATCTACCGAGGGCCTGAGGTCAGCCTGGGCCATGGCAGCATCCTAGAGGAAA ATGTGCTCCTGGGCTCTGGCACTGTCATTGGCAGCAATTGCTTTATCACCAACAGTGTCATTGGCCCCGGCTGCC ACATTGGTGATAACGTGGTGCTGGACCAGACCTACCTGTGGCAGGGTGTTCGAGTGGCGGCTGGAGCACAGATCC ATCAGTCTCTGCTTTGTGACAATGCTGAGGTCAAGGAACGAGTGACACTGAAACCACGCTCTGTCCTCACTTCCC AGGTGGTCGTGGGCCCAAATATCACGCTGCCTGAGGGCTCGGTGATCTCTTTGCACCCTCCAGATGCAGAGGAAG ATGAAGATGATGGCGAGTTCAGTGATGATTCTGGGGCTGACCAAGAAAAGGACAAAGTGAAGATGAAAGGTTACA ATCCAGCAGAAGTAGGAGCTGCTGGCAAGGGCTACCTCTGGAAAGCTGCAGGCATGAACATGGAGGAAGAGGAGG GAACACTACAGCGGGGCAAAGAGGAGAACATTTCTTGTGACAATCTCGTCCTGGAAATCAACTCTCTCAAGTATG CCTATAACGTAAGTCTAAAGGAGGTGATGCAGGTACTGAGCCACGTGGTCCTGGAGTTCCCCCTGCAACAGATGG ATTCCCCGCTTGACTCAAGCCGCTACTGTGCCCTGCTGCTTCCTCTGCTAAAGGCCCTGGAGCCCTGTTTTTAGGA ACTACATAAAGCGCGCAGCCGACCATTTGGAAGCGTTAGCAGCCATTGAGGACTTCTTCCTAGAGCATGAAGCTC TTGGTATTTCCATGGCCAAGGTACTGATGGCTTTCTACCAGCTGGAGATCCTGGCTGAGGAAACAATTCTGAGCT GGTTCAGCCAAAGAGATACAACTGACAAGGGCCAGCAGTTGCGCAAGAATCAACAGCTGCAGAGGTTCATCCAGT TGCCCTCCTGGCTCCTGGGCTGGGACAAGTGAGGAACTAGCTGCAGAGGGATGAGTGACCACCATCCAGGCTGAG ACTGAAAGGAGCAGAGCTGGAACTACAGTATTCTTTCCCCTGCTAGCAACCATGTGCCTCCCATCCTGACTGTG GAGTTGGGATGTGGAAGTGGGGCTGGAACAAAGCTTCTGCCTAGGGAGGAGCTAAGCAGGCCCGGCAGTTGGAGG AAGGCCAGAGGAACAGCTTTGTGCTCCGGCTTTCCCTCAGGGAACAGCAGAGAGCAGTTGGCTCTTTCTGCTGCT TGTATATGTTAATATTAAAAGAGAGTGGTGT

PCT/US2003/028547

FIGURE 1311

MAAPVVAPPGVVVSRANKRSGAGPGGSGGGARGAEEEPPPPLQAVLVADSFDRRFFPISKDQPRVLLPLANVAL
IDYTLEFLTATGVQETFVFCCWKAAQIKEHLLKSKWCRPTSLNVVRIITSELYRSLGDVLRDVDAKALVRSDFLL
VYGDVISNINITRALEEHRLRRKLEKNVSVMTMIFKESSPSHPTRCHEDNVVVAVDSTTNRVLHFQKTQGLRRFA
FPLSLFQGSSDGVEVRYDLLDCHISICSPQVAQLFTDNFDYQTRDDFVRGLLVNEEILGNQIHMHVTAKEYGARV
SNLHMYSAVCADVIRRWVYPLTPEANFTDSTTQSCTHSRHNIYRGPEVSLGHGSILEENVLLGSGTVIGSNCFIT
NSVIGPGCHIGDNVVLDQTYLWQGVRVAAGAQIHQSLLCDNAEVKERVTLKPRSVLTSQVVVGPNITLPEGSVIS
LHPPDAEEDEDDGEFSDDSGADQEKDKVKMKGYNPAEVGAAGKGYLWKAAGMNMEEEEELQQNLWGLKINMEEES
ESESEQSMDSEEPDSRGGSPQMDDIKVFQNEVLGTLQRGKEENISCDNLVLEINSLKYAYNVSLKEVMQVLSHVV
LEFPLQQMDSPLDSSRYCALLLPLLKAWSPVFRNYIKRAADHLEALAAIEDFFLEHEALGISMAKVLMAFYQLEI
LAEETILSWFSQRDTTDKGQQLRKNQQLQRFIQWLKEAEEESSEDD

PCT/US2003/028547

FIGURE 1312

PCT/US2003/028547

FIGURE 1313A

CAAGCGACACAATGAACACGCCTTCTCAGCCCGCCAGCACTTCTACCCTAGCCGGGCCCAGCCCCGAGCAGT GCAGCCTCCCGAGTGCAGAGTGCAGCCCCTGCCCGCCCTGGCCCATGTCTACCCTGCTGGATCCCAA GTAATGATGATCCCTTCCCAGATCTCCTACCCAGCCTCCCAGGGGGCCTACTACATCCCTGGACAGGGGCGTTCC ACATACGTTGTCCCGACACAGCAGTACCCTGTGCAGCCAGGAGCCCCAGGCTTCTATCCAGGTGCAAGCCCTACA GAATTTGGGACCTACGCTGGCGCCTACTATCCAGCCCAAGGGGTGCAGCAGTTTCCCACTGGCGTGGCCCCCACC CCAGTTTTGATGAACCAGCCACCCCAGATTGCTCCCAAGAGGGAGCGTAAGACGATCCGAATTCGAGATCCAAAC GGAGGCGGTCTGGAGCCTCAAGCTAATGGGGAGACGCCCCAGGTTGCTGTCATTGTCCGGCCAGATGACCGGTCA CAGGGAGCAATCATTGCTGACCGGCCAGGGCTGCCTGGCCCAGAGCATAGCCCTTCAGAATCCCAGCCTTCGTCG CCTTCTCCGACCCCATCACCATCCCCAGTCTTGGAACCGGGGTCTGAGCCTAATCTCGCAGTCCTCTATTCCT GGGGACACTATGACAACTATACAAATGTCTGTAGAAGAATCAACCCCCATCTCCCGTGAAACTGGGGAGCCATAT CGCCTCTCCCAGAACCCACTCCTCTCGCCGAACCCATACTGGAAGTAGAAGTGACACTTAGCAAACCGGTTCCA GAATCTGAGTTTTCTCCAGTCCTCTCCAGGCTCCCACCCCTTTGGCATCTCACACAGTGGAAATTCATGAGCCT AATGGCATGGTCCCATCTGAAGATCTGGAACCAGAGGTGGAGTCAAGCCCAGAGCTTGCTCCTCCCCCAGCTTGC CCCTCCGAATCCCCTGTGCCCATTGCTCCAACTGCCCAACCTGAGGAACTGCTCAACGGAGCCCCCTCGCCACCA GCTGTGGACTTAAGCCCAGTCAGTGAGCCAGAGGAGCCCAAGGAGGTGACAGCATCAATGGCGCCCCCACC ATCCCCTCTGCTACTCCAGCTACGGCTCCTTCAGCTACTTCCCCAGCTCAGGAGGAGGAGAAATGGAAGAAGAAGAA GAAGAGGAAGAAGGAGAAGCAGGAGAAGCAGGAGAAGCTGAGAGTGAGAAAGGAGGAGGAACTGCTCCCCCA GAGAGTACCCCTATTCCAGCCAACTTGTCTCAGAATTTGGAGGCAGCAGCCACCCAAGTGGCAGTATCTGTG CCAAAGAGGAGACGGAAAATTAAGGAGCTAAATAAGAAGGAGGCTGTTGGAGACCTTCTGGATGCCTTCAAGGAG GGTGTGCCCCCACGTCCTGAGGAAGCAGATGAGACCTGGGACTCAAAGGAAGACAAAATTCACAATGCTGAGAAC ATCCAGCCCGGGGAACAGAAGTATGAATATAAGTCAGATCAGTGGAAGCCTCTAAACCTAGAGGAGAAAAAACGT TACGACCGTGAGTTCCTGCTTGGTTTTCAGTTCATCTTTGCCAGTATGCAGAAGCCAGAGGGATTGCCACATATC AGTGACGTGGTGCTGGACAAGGCCAATAAAACACCACTGCGGCCACTGGATCCCACTAGACTACAAGGCATAAAT TGTGGCCCAGACTTCACTCCATCCTTTGCCAACCTTGGCCGGACAACCCTTAGCACCCGTGGGCCCCCAAGGGGT GGGCCAGGTGGGGAGCTGCCCCGTGGGCCGGCTGGCCTGGGACCCCGGCGCTCTCAGCAGGGACCCCGAAAAGAA CCACGCAAGATCATTGCCACAGTGTTAATGACCGAAGATATAAAACTGAACAAAGCAGAGAAAGCCTGGAAAACCC AGCAGCAAGCGGACGGCGGCTGATAAGGATCGAGGGGAAGAAGATGCTGATGGCAGCAAAACCCAGGACCTATTC CGCAGGGTGCGCTCCATCCTGAATAAACTGACACCCCAGATGTTCCAGCAGCTGATGAAGCAAGTGACGCAGCTG GCCATCGACACCGAGGAACGCCTCAAAGGGGTCATTGACCTCATTTTTGAGAAGGCCATTTCAGAGCCCAACTTC TCTGTGGCCTATGCCAACATGTGCCGCTGCCTCATGGCGCTGAAAGTGCCCACTACGGAAAAGCCAACAGTGACT GTGAACTTCCGAAAGCTGTTGTTGAATCGATGTCAGAAGGAGTTTGAGAAAGACAAAGATGATGATGAGGTTTTT GCTCGGGACATAGCCCGGCGCGCTCTTTAGGGAATATCAAGTTTATTGGAGAGTTGTTCAAACTGAAGATGTTA ACAGAGGCAATAATGCATGACTGTGTGGTCAAACTGCTTAAGAACCATGATGAAGAGTCCCTTGAGTGCCTTTGT CGTCTGCTCACCACCATTGGCAAAGACCTGGACTTTGAAAAAGCCAAGCCCCGAATGGATCAGTATTTCAACCAG ATGGAAAAATCATTAAAGAAAAGAAGACGTCATCCCGCATCCGCTTTATGCTGCAGGACGTGCTGGATCTGCGA GGGAGCAATTGGGTGCCACGCCGAGGGGATCAGGGTCCCAAGACCATTGACCAGATCCATAAGGAGGCTGAGATG GAAGAACATCGAGAGCACATCAAAGTGCAGCAGCTCATGGCCAAGGGCAGTGACAAGCGTCGGGGCGGTCCTCCA GGCCCTCCCATCAGCCGTGGACTTCCCCTTGTGGATGATGGTGGCTGGAACACAGTTCCCATCAGCAAAGGTAGC CGCCCCATTGACACCTCACGACTCACCAAGATCACCAAGCCTGGCTCCATCGATTCTAACAACCAGCTCTTTGCA CCTGGAGGGCGACTGAGCTGGGGCAAGGGCAGCAGCGGAGGCTCAGGAGCCAAGCCCTCAGACGCATCAGAA GCTGCTCGCCCAGCTACTAGTACTTTGAATCGCTTCTCAGCCCTTCAACAAGCGGTACCCACAGAAAGCACAGAT AATAGACGTGTGGTGCAGAGGAGTAGCTTGAGCCGAGAACGAGGCGAGAAAGCTGGAGACCGAGAGACCGCCTA GAGCGGAGTGAACGGGGAGCGGCCTGGGGACCGCCTTGATCGTGCGCGGACACCTGCTACCAAGCGGAGCTTC AGCAAGGAAGTGGAGGAGCGGAGTAGAGAACGGCCCTCCCAGCCTGAGGGGCCTGCGCAAGGCAGCTAGCCTCACG GAGGATCGGGACCGTGGGCGGGATGCCGTGAAGCGAGAAGCTGCCCTACCCCCAGTGAGCCCCCTGAAGGCGGCT

PCT/US2003/028547

FIGURE 1313B

CTCTCTGAGGAGGAGTTAGAGAAGAAATCCAAGGCTATCATTGAGGAATATCTCCATCTCAATGACATGAAAGTA GGCAGTCCAGTGCGTGCAGGAGCTGGCCTCACCCTCCTTGCTCTTCATCTTTGTACGGCATGGTGTCGAGTCTAC GCTGGAGCGCAGTGCCATTGCTCGTGAGCATATGGGGCAGCTGCTGCACCAGCTGCTCTGTGCTGGGCATCTGTC TACTGCTCAGTACTACCAAGGGTTGTATGAAATCTTGGAATTGGCTGAGGACATGGAAATTGACATCCCCCACGT GTGGCTCTACCTAGCGGAACTGGTAACACCCATTCTGCAGGAAGGTGGGGTGCCCATGGGGGAGCTGTTCAGGGA GATTACAAAGCCTCTGAGACCGTTGGGCAAAGCTGCTTCCCTGTTGCTGGAGATCCTGGGCCTCCTGTGCAAAAG GGACATTGGTGCATTCGTCGCTGAACAGAAGGTGGAGTATACCCTGGGAGAGGAGGAGTCGGAAGCCCCTGGCCAGAG GGCACTCCCCTCCGAGGAGCTGAACAGGCAGCTGGAGAAGCTGCTGAAGGAGGGCAGCAGTAACCAGCGGGTGTT CGACTGGATAGAGGCCAACCTGAGTGAGCAGCAGATAGTATCCAACACGTTAGTTCGAGCCCTCATGACGGCTGT GCAGAAATACCTGTGTGACGAGCAGAAGGAGCTACAGGCGCTCTACGCCCTCCAGGCCCTTGTAGTGACCTTAGA ACAGCCTCCCAACCTGCTGCGGATGTTCTTTGACGCACTGTATGACGAGGACGTGGTGAAGGAGGATGCCTTCTA CAGTTGGGAGAGTAGCAAGGACCCCGCTGAGCAGCAGGGCAAGGGTGTGGCCCTTAAATCTGTCACAGCCTTCTT CAAGTGGCTCCGTGAAGCAGAGGAGGAGTCTGACCACAACTGAGGGCTGGTGGGGCCCGGGGACCTGGAGCCCCAT CCGTCCTCGCTGCGGGGCATATGCCCCAGCCCCTGTACCACCCCTGCTGTTGCCTGGGCAGGGGAAGGGGGG GCACGGTGCCTGTAATTATTAAACAT

PCT/US2003/028547

1414/6881 FIGURE 1314A

GGCGGCGCGCTGGGACCCGGTAGCGGCCGGAGAACAAGGGAGCTGGCGCCGCCAGCAGCCGCCGAGCTGGGTT GAGCCGCTGGGCCGCGCGCGCCGCCGCCGTCTGGGAGGCTCGGCCCGGCCCGAGCAGGCCGCGCGGG CCGCCGGGCCCAGAGCCATGGGCGAGACCAAGATCATCTACCACTTGGATGGGCAGGAGACGCCGTACC TTGTGAAGCTGCCCTGCCCGAGCGCGTCACCTTGGCGGACTTTAAGGGCGTTTTGCAGCGACCCAGCTATA AGTTCTTCTTCAAGTCTATGGACGACGATTTCGGAGTGGTGAAGGAGGAGATCTCGGATGACAATGCCAAGCTAC CATGCTTCAATGGCCGGGTGGTGTCCTGGCTGGTGTCAGCTGAGGGCTCACACCCAGACCCAGCCCCCTTCTGTG CTGATAACCCATCGGAGCTGCCACCACCTATGGAGCGCACGGGAGGCATCGGGGACTCCCGACCCCCATCCTTCC ACCCTCATGCTGGTGGGGGCAGCCAGGAGAACCTGGACAATGACAGAGACGGACTCTTTGGTGTCTGCCCAGC GAGAGCGGCCACGCCGGAGGGATGGCCCAGAGCATGCAACCCGGCTAAATGGAACTGCGAAGGGGGAACGGCGGC GAGAACCAGGGGGTTATGATAGCTCATCCACCCTTATGAGCAGTGAGCTGGAGACCACCAGCTTCTTTGACTCAG ATGAGGATGACTCCACCAGCAGGTTCAGCAGCTCCACAGAACAGAGCAGTGCCTCACGCCTGATGAGAAGACACA AGCGGCGGCGGCAGCAGCAGGTTTCTCGGATTGAGCGGTCCTCGTCCTTCAGCAGCATCACGGACTCCACCA TGTCACTCAACATCATCACGGTCACTCTCAACATGGAAAAATATAACTTCTTGGGCATCTCCATTGTGGGCCAAA GCAACGAGCGTGGTGACGGCGCATCTACATTGGCTCTATCATGAAGGGTGGGGCCGTGGCTGATGGACGCA TCGAGCCAGGAGATATGTTGTTACAGGTAAACGAGATCAACTTTGAGAACATGAGTAATGACGATGCAGTCCGGG TACTGCGGGAGATTGTGCACAAACCGGGGCCCATCACCCTGACTGTAGCCAAGTGCTGGGACCCAAGTCCACGTG GTTGCTTCACATTGCCCAGGAGCGAGCCCATCCGGCCCATTGACCCTGCGGCCTGGGTCTCCCACACTGCAGCCA CCATGGCCTCCCTGAATCAGGGTTGGAGGTCCGTGACCGCATGTGGCTCAAGATTACCATCCCTAATGCTTTCA CCAGCAACCTGCTGAAAGCTGGCTTCATCCGCCATACCGTCAACAAGATCACCTTCTCCGAGCAGTGCTACTACA TCTTCGGTGACCTCTGCGGCAACATGGCCAACCTGTCTCTCCACGATCACGATGGCTCCAGTGGCGCCTCTGACC AGGACACACTGGCCCCTTTGCCGCACCCGGGGGCCCCCTTGGCCCATGGCTTTCCCGTACCAGTACCCGCCAC CCCCGCACCCATACAACCCGCACCCGGGCTTCCCGGAGCTGGGCTACAGCTACGGCGGGGGCAGCGCCAGCAGTC CCGGGGACTCCAAGTCCGGGGCAGCGCAGCGCAATCGGACCACACCACACGCAGCAGCCTGCGGGGGCCGCGGG AGCGGGCGCCCAGCGAGCGCTCAGGGCCGGCGGCGGCGAGCACCACCGCAGCCACCATTCCCTGGCCAGCA GCCTTCGCAGCCACCACACACCCGAGCTACGGTCCTCCCGGAGTGCCCCCTCTCTACGGCCCCCCATGCTGA TGATGCCCCGCGCCCCGCGGCCATGGGGCCCCCAGGAGCCCCTCCGGGCCGGACCTGGCCTCAGTGCCCCCGG AACTGACCGCCAGCAGACAGTCCTTCCGCATGGCCATGGGAAACCCCAGTGAGTTCTTTGTGGATGTGATGTGAG CAGGGCCCCTCCCCAGCTCCATTCCGCTCCCACCCCAGCCGGCTGCGTTCCTCTCTCCATCCGTCCTTTTT TACTTTGTCTGGTACCTGAAAGGGAAATAAAAGGAACTAAATCCAGGTGCGCTAACTGCTCGCAGGGTGCTGCGA GGGTGGGTGCACCTACCGATTGGCTCTGCAGCCCCCTAACCTGCCTCTGGCCCCAGTTCGTTTCCTCTGCCCAC TAATCCCTGCGCAGGACTTCCCAGGACCCCTTTTGTCTCTGGGACCAGACTTGTTGGTGCTACCCCTTACTCCCC TCTGCAACCCCCATTTTGGGAGTTGACCCCAGCAATGACCTTGGTGGCACGCTCACTCCCTCATTCTCTCGTTTC CCCTTTAGCTCCCTTTCACCATTTATTCAGCTACATCATCCCTCTATTAACCCCACCCCATCAGGCACGTGTGCA AACCTCTTGACTTTACCCCACATTACTGAAACCAAAATATATTTGCTTCATCTGCCCCTACTAACCATCCCCCTG GATCAGAGGCCCAGAGGCCCCCTCAGTTGCCTGAGCAGCTGGTGGCTTCCAGGGAGCATCTCTGCTCTACCCCT GCCCCATGCCTGCCTGCGTGCTGGTTCCTTCAGACCCCTAACCCTAACCAGCAGGCTCATCTCACCTCCAG GCCTGAAACATTTCTTTTCTTTTTTTCCTCCCCAATTTTCCCTGGGCCTGGAGCAGCCAAGAATTTCGGGC TGTTTGACTTTCTGTGAGCCCCCAGCGAGGGGAGGCCCAGCCTCCGAGGAGCCAGGAACCCTGCTTCAGCAGCC CCTCAGGGCTTCCCAAGGATGTCCAGCCCCACACCCACACGTTAACATAATGAGTCACTAGGCTTCTGGGGAGG GCCCAACTTCACCCATGCATGAGAGACTCTCCTCTTTCCAGAGAGAATCGGATCGCACCACGTGTGGCAGCCTG GCATACACAGGTGCCTATGCAAGTTCATTTAAGCCTCAGGGCTGGTCCCTGCCCAAAGGGCTGGACCCTCCTAAT

PCT/US2003/028547

1415/6881 FIGURE 1314B

CCTCTCCTAGGTTGTGGGGCTGGTCCCCTGACACCCTTCTCCCCTTCCTGGTAGACCTTAAACCTCGCACACATG TCCCCAGCATTTTCTCACCTGGATAAAGCCCATAAGCTGGGTCTCAGGCTGGGCTCAGCAAAGGACTCGCCTTGC AACCGACAGGCCATTCCCACCCCCACACACACCTCCCCTGTTTTCACATTCACCATGGCATCCCAGAGCAAGGA TTTCACCTTATTCTCTACTTTAAACAAATCATAACTTTCTCTTTAAGCCTCTGCTATAAATTCTCCTGGCTCTCC TGGGCTTCCATATTTTGGGGGCTGGGGTGTCAAAAGTGAGATGAAGTTCTTAGCTCCAGGTTTTGGGGTAAACCA AGGTAGGAACATTTTGGCATTTATTTCAATTAACAATACTTCCTTGGACGGGTGCGGTGGCTCACGTCTGTAATC CCAGCACTTTGGGAGGCTGAGACAGGTGGATCACTTGAGGTCGGGAGTTCGAGACCAGCCTGGCCAACATAGCAA GCTGAGGCACAAGAATCGCTTGAATCCAGGAAGCAAGCGGAGGTTGCAGTGAGTTGAGATCGCACTCCAGCCTGG GTGACAGAGTGAGATTCTGTCTCAAAAGCAAACTAACAAAGAAAAACAATACTTCCTGGGGTTTTGGTGTGCAGA GGGCTTTGTTGGAAGTGTGACTCAATCTTGCCTGCCTTCTGGGAGCTCTAGAATTGTTCCCAACCCAGTCCATGG TCTCAACGATTGCTCATGCCTGTCAGTATCAGTGCTTCCATCGTTCCATCTTTGATTCACTTCTCTTTCT ATTTACTCCCAAAATGGAGTCATTCATCCTGATGTCCTCAATTGCTGCTGATATGCTGGTGATTCCCAAATACAT AGCTCCAACCCCCAACTTCCCCCAGACTTTAGATCTGTATTGGTATTACCTACTGGACATCTCTATGGACAGTTC CGTATAGACTCAACTCATCTGCCCAACCAAGTATGTTCCTCCTGAATTCCTCCTGGTTACTTCATCACAATCT ACATAGGCTCACCAGCTAGAAACATTTATGAGCTTACATTCCTTCTTCCCATATCTTATCAGCATATCATATCCA TTTCACTCCAACACTCTGTCTTGAATTTGGCCCTCCCCTCTCCCCTCTTAATTCATTGGAGCATGGGATT TGGAGTTAGGTGGTTTTGGGTTTGAATTCCAGCTCTACTATTTTTGGTTGTGTGATAGAGTTATTTAACCTCTCT GATATTGTACGAAAAGTGCCTAGCACAGTGCCTGGCACACAGTAGAGTAGGTGCTCAATAAATGGTAGCTATTAT TATT

PCT/US2003/028547

FIGURE 1315

CCGAGGCAGCGGGCAGACGAGCAGGGGGCGGGCCGGACATCTTGGGATCCGGAGAGTGGCCGGGCCGGCAGAGCAG GGGGCCGAGGACACCAGGTCTGTTCTCAGAGCGATGGGCCGCGGAGACTGATCTGCCGCCATGATTGGAGGCTTA TTCATCTATAATCACAAGGGGGGGGGCTCCTCCCCGAGTCTACCGAGATGACATCGGGAGGAACGCAGTGGAT GCCTTTCGGGTCAATGTTATCCATGCCCGGCAGCAGGTGCGCAGCCCCGTCACCAACATTGCTCGCACCAGCTTC TTCCACGTTAAGCGGTCCAACATTTGGCTGGCAGCAGTCACCAAGCAGAATGTCAACGCTGCCATGGTCTTCGAA TTCCTCTATAAGATGTGTGACGTGATGGCTGCCTACTTTGGCAAGATCAGCGAGGAAAACATCAAGAACAATTTT GTGCTCATATATGAGCTGCTGGATGAGATTCTAGACTTTGGCTACCCACAGAATTCCGAGACAGGCGCGCTGAAA ACTGGGCAGATTGGCTGGCGGCGAGAGGGTATCAAGTATCGTCGGAATGAGCTCTTCCTGGATGTGCTGGAGAGT GTGAACCTGCTCATGTCCCCACAAGGGCAGGTGCTGAGTGCCCATGTGTCGGGCCGGGTGGTGATGAAGAGCTAC CTGAGTGGCATGCCTGAATGCAAGTTTGGGATGAATGACAAGATTGTTATTGAAAAGCAGGGCAAAGGCACAGCT GATGAAACAAGCAAGAGCGGGAAGCAATCAATTGCCATTGATGACTGCACCTTCCACCAGTGTGTGCGACTCAGC AAGTTTGACTCTGAACGCAGCATCAGCTTTATCCCGCCAGATGGAGAGTTTGAGCTTATGAGGTATCGCACAACC AAGGACATCATCCTTCCCGGGTGATCCCGCTAGTGCGAGAAGTGGGACGCACCAAACTGGAGGTCAAGGTG GTCATCAAGTCCAACTTTAAACCCTCACTGCTGGCTCAGAAGATCGAGGTGAGGATCCCAACCCCACTGAACACA AGCGGGGTGCAGGTGATCTGCATGAAGGGGAAGGCCAAGTACAAGGCCAGCGAGAATGCCATCGTGTGGAAGATC AAGCGCATGGCAGGCATGAAGGAATCGCAGATCAGCGCAGAGATTGAGCTTCTGCCTACCAACGACAAGAAGAAA TGGGCTCGACCCCCATTTCCATGAACTTTGAGGTGCCATTCGCGCCCTCTGGCCTCAAGGTGCGCTACTTGAAG GTGTTTGAACCGAAGCTGAACTACAGCGACCATGATGTCATCAAATGGGTGCGCTACATTGGCCGCAGTGGCATT TATGAAACTCGCTGCTAGCTGCCACTAGGCAGCTAGCCCACCTCCCCAGCCACCTCCTCCACAGGTCCAGGTGC CGCTCCCTCCCCACCACACACTAGTGTCTCCTCCCTCCTGCTTTGCTGCCTTCCCTTTGCACCAGCCCGAGTCT CTCCTGCTCTCCCATCCACCTGTCTGTCCTGGCCTAATGCCAGGCTCTGAGTTCTGTGACCAAAGCCAGGTGGGT AAAGGCCAGTAATGGATCCCCGGCCTCAGTCCCTACTCTGCTTTGGGATAGTGTGAGCTTCATTTTGTACACGTG TGACTTCGTCCAGTTACAAACCCAATAAACTCTGTAGAGTGG

PCT/US2003/028547

FIGURE 1316

CCAGGCAGAGGGACTCTGCAAGCAATGGCTGCAGCGCGCCTGCAAGAGCGGCGCCTGCTGCTGCTGCGGGAGCCGCG CTACACGCTGCTGGCCGCCTGCCTCTGCCTGGCGGAGGTGGGCATCACCTTCTGGGTCATTCACAGGGTGGC ATACACAGAGATTGACTGGAAGGCCTACATGGCCGAGGTAGAAGGCGTCATCAATGGTACCTATGACTATACCCA ACTGCAGGGTGACACCGGACCACTTGTGTACCCAGCTGGTTTCGTGTACATCTTTATGGGGTTGTACTATGCCAC CAGCCGAGGCACTGACATCCGCATGGCCCAGAACATCTTTGCTGTGCTCTACCTGGCTACCTTGCTGTCTT $\verb|CTTGATCTATCACCAGACCTGCAAGGTACCTCCCTTCGTCTTTTTCTTCATGTGCTGCGCCTCTTACCGTGTCCA|\\$ CTCCATCTTTGTGCTGCGGCTCTTCAATGACCCAGTGGCCATGGTGCTGCTCTTCCTCAGTATCAACCTCCTGCT GGCCCAGCGCTGGGGCTGGGGCTGCTTTTTCAGCCTGGCAGTCTCTGTGAAGATGAATGTGCTGCTCTTCGC CCCTGGGTTACTGTTTCTCCTCACACAGTTTGGCTTCCGTGGGGCCCTCCCCAAGCTGGGAATCTGTGCTGG CCTTCAGGTGGTGCTGGGGCTGCCCTTCCTGCTGGAGAACCCCAGCGGCTACCTGTCCCGCTCCTTTGACCTTGG CCGCCAGTTTCTGTTCCACTGGACAGTGAACTGGCGCTTCCTCCAGAGGCGCTCTTCCTGCATCGAGCCTTCCA CCTGGCCCTGTTGACTGCCCACCTCACCCTGCTCCTGCTGTTTGCCCTCTGCAGGTGGCACAGGACAGGGGAAAG TATCTTGTCGCTGCTGAGGGATCCCTCCAAAAGGAAGGTTCCACCCCAGCCCCTTACACCCAACCAGATCGTTTC CCACACACTGCCCTACCTCTGTGGGCCATGCCTGCACGGTGGCTCACACCTGCTCAGGTTGTTGGTGCTGGG GCTCATCGAGCTCTCCTGGAACACATACCCTTCCACATCCTGCAGCTCTGCTGCCCTGCACATATGCCATGCCGT TCCACCCCTTTCCCTCAGGACCTGAGTCTACCCTCAGGACCTGGGGTTGGACTCTGCCCTTCCAAATAAAC

PCT/US2003/028547

FIGURE 1317

MAAGLRKRGRSGSAAQAEGLCKQWLQRAWQERRLLLREPRYTLLVAACLCLAEVGITFWVIHRVAYTEIDWKAYM AEVEGVINGTYDYTQLQGDTGPDVYPAGFVYIFMGLYYATSRGTDIRMAQNIFAVLYLATLLLVFLIYHQTCKVP PFVFFFMCCASYRVHSIFVLRLFNDPVAMVLLFLSINLLLAQRWGWGCCFFSLAVSVKMNVLLFAPGLLFLLLTQ FGFRGALPKLGICAGLQVVLGLPFLLENPSGYLSRSFDLGRQFLFHWTVNWRFLPEALFLHRAFHLALLTAHLTL LLLFALCRWHRTGESILSLLRDPSKRKVPPQPLTPNQIVSTLFTSNFIGICFSRSLHYQFYVWYFHTLPYLLWAM PARWLTHLLRLLVLGLIELSWNTYPSTSCSSAALHICHAVILLQLWLGPQPFPKSTQHSKKAH

PCT/US2003/028547

FIGURE 1318

PCT/US2003/028547

1420/6881 FIGURE 1319

MASPGAGRAPPELPERNCGYREVEYWDQRYQGAADSAPYDWFGDFSSFRALLEPELRPEDRILVLGCGNSALSYE
LFLGGFPNVTSVDYSSVVVAAMQARYAHVPQLRWETMDVRKLDFPSASFDVVLEKGTLDALLAGERDPWTVSSEG
VHTVDQVLSEVSRVLVPGGRFISMTSAAPHFRTRHYAQAYYGWSLRHATYGSGFHFHLYLMHKGGKLSVAQLALG
AQILSPPRPPTSPCFLQDSDHEDFLSAIQL

PCT/US2003/028547

FIGURE 1320

GAGGCTGCGCCGCAGGTTCCGGCTGCTGGCGGCGTTGCGGCCGCAGGTTTGACTCCCGTGCGGTGCGGCCCAG CAGCCACAAAGCTCCCGCTGCCATTGCTCCTTGTACTCCCGCCGTCACTGCCGCTGTCCAACCCCTCCCCCGGGG CTTGCGCGGCGCTCCCACACCCCTCGGCCCGTGTACGCGCTCTGCACCTGCCCGAAAACATGTTGCAGAC ACCAGAGAGCAGGGGGCTCCCGCTCCCGCAGGCCGAGGGGGAGAAGGATGGCGGCCATGATGGTGAGACCCGGGC CACCCGGAAAGGCGCGAGGGCCTTGGCGGCCAAAGCCTTGGCAAGGCGCAGGGCCTACCGCCGGCTGAATCGGAC GGTGGCGGAGTTGGTGCAGTTCCTCCTGGTGAAAGACAAGAAGAAGACTCCCATCACACGCTCGGAGATGGTGAA ATACGTTATTGGAGACTTGAAGATTCTGTTCCCGGACATCATCGCAAGGGCCGCAGAGCATCTGCGGTATGTCTT TGGTTTTGAGCTGAAACAGTTTGACCGCAAGCACCACACTTACATCCTGATCAACAAACTAAAACCTCTGGAGGA GGAGGAGGAGGAGGAGGAGGAGGAGGATGGCCCCAGATTGGGTCTGTTAATGATGATCCTGGGCCTTATCTATAT GAGAGGTAATAGCGCCAGGGAGGCCCAGGTCTGGGAGATGCTGCGTCGGTTGGGGGTGCAACCCTCAAAGTATCA TTTCCTCTTTGGGTATCCGAAGAGGCTTATTATGGAAGATTTTGTGCAGCAGCGATATCTCAGTTACAGGCGGGT GCCTCACACCAATCCACCAGAATATGAATTCTCTTGGGGTCCCCGAAGCAACCTGGAAATCAGCAAGATGGAAGT CCTGGGGTTCGTGGCCAAACTGCATAAGAAGGAACCGCAGCACTGGCCAGTGCAGTACCGTGAGGCCCTAGCAGA CGAGGCCGACAGGCCCAGAGCCAGAGCTGAAGCCAGTATGAGGGCCAGGGCCAGTGCTAGGGCCGGCAT CCACCTCTGGTGAGGGTTGGTGAAAAGTTGGCCAGTGGGTCCCCGTGAGGACGAACTACTGTCCTGAGTCATAAG TAATATGGGTGGGGGGGGTCTTATTTCTGTAGAAATCGTGTGACTTTAAGGATTTAGATTTTGTATCTTATGT TTTGTAACATTTAATAATTACTGTTAAAATGCTGTTTGTAAATGAGATTGGTCTACTTTTTCCTGTAGGATTTTA TTGTAGAGTTTTGCTGGTTTTGTAAAATGGATGGAAGAACTTTGTATTTATACTGTGATTTTGAACAGATTATGC AACATTGGAAGGAAGGCTGTACTTTGATGGTTTGAAGGAACTCAGCAGTATGATGATCTGGTTCCAGGGGAAAAA AATAGCTGGTTGGTGTCTAGCCCCCCAACACTTTTGTCTGTTGTTGTATAAAAGAAGAAGAAGACTGGCATGTACCTT CATTTGCTTAGCTATTTGAGTATCTAGAGAAAAATTAAAATGCAATGAGTTAGCAGTATACCCTGGCACACTTAA TAAATTAAACATTTGTGGAGC

PCT/US2003/028547

1422/6881 FIGURE 1321

MLQTPESRGLPVPQAEGEKDGGHDGETRAPTASQERPKEELGAGREEGAAEPALTRKGARALAAKALARRRAYRR LNRTVAELVQFLLVKDKKKSPITRSEMVKYVIGDLKILFPDIIARAAEHLRYVFGFELKQFDRKHHTYILINKLK PLEEEEEEDLGGDGPRLGLLMMILGLIYMRGNSAREAQVWEMLRRLGVQPSKYHFLFGYPKRLIMEDFVQQRYLS YRRVPHTNPPEYEFSWGPRSNLEISKMEVLGFVAKLHKKEPQHWPVQYREALADEADRARAKARAEASMRARASA RAGIHLW

PCT/US2003/028547

1423/6881 FIGURE 1322

PCT/US2003/028547

FIGURE 1323

PCT/US2003/028547

1425/6881 FIGURE 1324

 ${\tt MCRGGRRFAPTKTWRRWHRRVNTTQKRYAICSALAASALPALVMSKGHRIEEVPELPLVFEDKVEGYKKTKEAVL}\\ {\tt LLKKLKAWNDIEKVYASQRMRAGTGKKPVVGKKGKKAAVGVKKQKKPLVGKKAAATKKPAPEKKPAEKKPTTEEKKPAA}\\ {\tt KPAA}$

PCT/US2003/028547

1426/6881 FIGURE 1325

PCT/US2003/028547

1427/6881 FIGURE 1326

MTGVKLVLNSRLWKALMEKACAKLLPFCEVLKTYSRCKLYTPMPGLINGIRGVRFPPEFSPPSENAAGTLIRCEA AASFGAVPSTPVLSPPSPGRCSGCTCLCHLPPPGALGGSASQTFPSNCFPPPPPPNCGAPPSVSSREPPSPLGALE SPETVKASQLRDPPSTREPPHSRSGAPPPRRVESRSPRAPEPLAAPARRLPGTKPDRAAGGGGGQPGGGHPSYCT PTLKILNQPVNSSRLGLSDQWPDAPSDLPPAPAKPPHLRRPLSSPCSGPGGAGALTHARSGPGRLGERLGRTAPK TVNRSAHQRLDSAPQLPTRLERWPGPPRLAAPPAAIGPRP

PCT/US2003/028547

FIGURE 1327

AATTCCGGTTGAAACCATCCCTCAGCTCCTAGAGGGAGATTGTTAGATC<u>ATG</u>AAACTAATTACCATCCTTTTCCT CTGCTCCAGGCTACTACTAAGTTTAACCCAGGAATCACAGTCCGAGGAAATTGACTGCAATGACAAGGATTTATT TAAAGCTGTGGATGCTGCTCTGAAGAAATATAACAGTCAAAACCAAAGTAACAACCAGTTTGTATTGTACCGCAT AACTGAAGCCACTAAGACGGTTGGCTCTGACACGTTTTATTCCTTCAAGTACGAAATCAAGGAGGGGGATTGTCC TGTTCAAAGTGGCAAAACCTGGCAGGACTGTGAGTACAAGGATGCTGCAAAAGCAGCCACTGGAGAATGCACGGC AACCGTGGGGAAGAGGAGCAGTACGAAATTCTCCGTGGCTACCCAGACCTGCCAGATTACTCCAGCCGAGGGCCC TGTGGTGACAGCCCAGTACGACTGCCTCGGCTGTGTGCATCCTATATCAACGCAGAGCCCAGACCTGGAGCCCAT GGCCCAAAGACAGGTGGTGGCTGGATTGAACTTTCGAATTACCTACTCAATTGTGCAAACGAATTGTTCCAAAGA GAATTTTCTGTTCTTAACTCCAGACTGCAAGTCCCTTTGGAATGGTGATACCGGTGAATGTACAGATAATGCATA CATCGATATTCAGCTACGAATTGCTTCCTTCTCACAGAACTGTGACATTTATCCAGGGAAGGATTTTGTACAACC · ACCTACCAAGATTTGCGTGGGCTGCCCCAGAGATATACCCACCAACAGCCCAGAGCTGGAGGAGACACTGACTCA ACAGGTGGTGGCCAGGAAATATTTTATTGACTTCGTGGCCAGGGAAACCACATGTTCCAAGGAAAGTAATGA AGAGTTGACCGAAAGCTGTGAGACCAAAAAACTTGGCCAAAGCCTAGATTGCAACGCTGAAGTTTATGTGGTACC CTGGGAGAAAAAATTTACCCTACTGTCAACTGTCAACCACTGGGAATGATCTCACTGATGAAAAAGGCCTCCAGG TTTTTCACCTTTCCGATCATCACGAATAGGGGAAATAAAAGAAGAAACAACTAGTCACCTAAGGTCCTGCGAGTA TTTAAATAGAGAAGAATGCCATTTTATCACTCTGCCTCTGGGTGAAATAAAGATCAGTCTTGATGTTC

PCT/US2003/028547

1429/6881 FIGURE 1328

MKLITILFLCSRLLLSLTQESQSEEIDCNDKDLFKAVDAALKKYNSQNQSNNQFVLYRITEATKTVGSDTFYSFK
YEIKEGDCPVQSGKTWQDCEYKDAAKAATGECTATVGKRSSTKFSVATQTCQITPAEGPVVTAQYDCLGCVHPIS
TQSPDLEPILRHGIQYFNNNTQHSSLFMLNEVKRAQRQVVAGLNFRITYSIVQTNCSKENFLFLTPDCKSLWNGD
TGECTDNAYIDIQLRIASFSQNCDIYPGKDFVQPPTKICVGCPRDIPTNSPELEETLTHTITKLNAENNATFYFK
IDNVKKARVQVVAGKKYFIDFVARETTCSKESNEELTESCETKKLGQSLDCNAEVYVVPWEKKIYPTVNCQPLGM
ISLMKRPPGFSPFRSSRIGEIKEETTSHLRSCEYKGRPPKAGAEPASEREVS

PCT/US2003/028547

FIGURE 1329

GGCGGGAACTGAGGCGACTGTGGGGACATCAGTGATCGTAAGTCTCCTGGGCCCGTTATTCTCAGATTAGGTGAC GGAGCTAAGACTTCGAGACCATCTCGTCCTTTTTGTATCGCGGAAACCTGAGGAACGAGCCGGCGGCGGTGACCT CCGCTGACCAAGGATCGAGGAGTAGCTGCCAGTGCGGGAAGTAGCGGAGAACAAGAAAGCCAAACCCGTTCCC TGGGTGGAAAAATATCGCCCAAAATGTGTGGATGAAGTTGCTTTCCAGGAAGAAGTGGTTGCAGTGCTGAAAAAA TCTTTAGAAGGAGCAGATCTTCCTAATCTCTTGTTTTACGGACCACCTGGAACTGGAAAAACATCCACTATTTTG GCAGCAGCTAGAGAACTCTTTGGGCCTGAACTTTTCCGATTAAGAGTTCTTGAGTTAAATGCATCTGATGAACGT GGAATACAAGTAGTTCGAGAGAAAGTGAAAAATTTTGCTCAATTAACTGTGTCAGGAAGTCGCTCAGATGGGAAG CCGTGTCCGCCTTTTAAGATTGTGATTCTGGATGAAGCAGATTCTATGACCTCAGCTGCTCAGGCAGCTTTAAGA CGTACCATGGAGAAGGAGTCGAAAACCACCCGATTCTGTCTTATCTGTAACTATGTCAGTCGAATAATTGAACCC CTGACCTCTAGATGTTCAAAATTCCGCTTCAAGCCTCTGTCAGATAAAATTCAACAGCAGCGATTACTAGACATT GCCAAGAAGGAAAATGTCAAAATTAGTGATGAGGGAATAGCTTATCTTGTTAAAGTGTCAGAAGGAGACTTAAGA AAAGCCATTACATTTCTTCAAAGCGCTACTCGATTAACAGGTGGAAAGGAGATCACAGAGAAAGTGATTACAGAC ATTGCTGGGGTAATACCAGCTGAGAAAATTGATGGAGTATTTGCTGCCTGTCAGAGTGGCTCTTTTGACAAACTA GTAGAAAATAACTTATCTGATAAACAGAAGTCTATTATCACAGAAAAACTTGCCGTAATTGACAAATGCCTAGCA GATGGTGCTGATGAACATTTGCAACTCATCAGCCTTTGTGCAACTGTGATGCAGCAGTTATCTCAGAATTGTTAA CGTGAATATATCTGGATGGGGGGTTTTGTAAATAATGAAGTTGTAATAAAAATAAAATGACCAAAAGCACC

PCT/US2003/028547

FIGURE 1330

 $\verb|CCTCCAACCACCTGCACGCCTGCCAGGGCCTCTCTGGGGGCAGCCATGAAGTCCCTCGTCCTGCTCCTTTGT|\\$ $\verb|CTTGCTCAGCTCTGGGGCTGCCACTCAGCCCCACATGGCCCAGGGCTGATTTATAGACAACCGAACTGCGATGAT| \\$ TTGAACCAGATTGATGAAGTAAAGGTGTGGCCTCAGCAGCCCTCCGGAGAGCTGTTTGAGATTGAAATAGACACC CTGGAAACCACCTGCCATGTGCTGGACCCCACCCTGTGGCAAGATGCAGCGTGAGGCAGCTGAAGGAGCATGCT GTCGAAGGAGACTGTGATTTCCAGCTGTTGAAACTAGATGGCAAGTTTTCCGTGGTATACGCAAAATGTGATTCC AGTCCAGACTCAGCCGAGGACGTGCGCAAGGTGTGCCAAGACTGCCCCTGCTGGCCCCGCTGAACGACACCAGG GTGGTGCACGCCGCAAAGCTGCCCTGGCCGCCTTCAACGCTCAGAACAACGGCTCCAATTTTCAGCTGGAGGAA GCTAAAGAGGCCACAGAGGCAGCCAAGTGTAACCTGCTGGCAGAAAAGCAATATGGCTTTTGTAAGGCAACACTC AGTGAGAAGCTTGGTGGGGCAGAGGTTGCAGTGACCTGCACGGTGTTCCAAACACACCCGTGACCTCACAGCCC CAACCAGAAGGTGCCAATGAAGCAGTCCCCACCCCGTGGTGGACCCAGATGCACCTCCGTCCCCTCCACTTGGC GCACCTGGACTCCCTCCAGCTGGCTCACCCCCAGACTCCCATGTGTTACTGGCAGCTCCTCCAGGACACCAGTTG CACCGGGCGCACTACGACCTGCGCCACACCTTCATGGGTGTGTCTCATTGGGGTCACCCTCAGGAGAAGTGTCG CACCCCGGAAACACGCACAGTGGTGCAGCCTAGTGTTGGTGCTGCTGGGCCAGTGGTTCCTCCATGTCCG $\tt GGGAGGATCAGACACTTCAAGGTC{\color{red}{\textbf{TAG}}} GCTAGACATGGCAGAGATGAGGAGGTTTGGCACAGAAAACATAGCCAC$ CATTTTGTCCAAGCCTGGGCATGGGTGGGGGGCCTTGTCTGCTGGCCACGCAAGTGTCACATGCGATCTACATTA AGAAGGCATTAGGTTGACAACTTGTCATGATTTTGACGGTAAGCCACCATGATTGTGTTCTCTGCCTCTGGTTGA CCTTACAAAACCATTGGAACTGTGACTTTGAAAGGTGCTCTTGCTAAGCTTATATGTGCCTGTTAATGAAAGTG CCTGAAAGACCTTCCTTAATAAAGAAGGTTCTAAGCTG

PCT/US2003/028547

FIGURE 1331

MKSLVLLLCLAQLWGCHSAPHGPGLIYRQPNCDDPETEEAALVAIDYINQNLPWGYKHTLNQIDEVKVWPQQPSG ELFEIEIDTLETTCHVLDPTPVARCSVRQLKEHAVEGDCDFQLLKLDGKFSVVYAKCDSSPDSAEDVRKVCQDCP LLAPLNDTRVVHAAKAALAAFNAQNNGSNFQLEEISRAQLVPLPPSTYVEFTVSGTDCVAKEATEAAKCNLLAEK QYGFCKATLSEKLGGAEVAVTCTVFQTQPVTSQPQPEGANEAVPTPVVDPDAPPSPPLGAPGLPPAGSPPDSHVL LAAPPGHQLHRAHYDLRHTFMGVVSLGSPSGEVSHPRKTRTVVQPSVGAAAGPVVPPCPGRIRHFKV

PCT/US2003/028547

FIGURE 1332

TTTCTTTAAGAGGAAGACGCGGTCGTAGGTGCGAGGATTTCTGGTCCGCATGCTCCTGCTCCTGACTCACCGCTG
TTCGCTCTCGCCGCCGAGGAACAAGTCGGTCATGAAGCCGCGCAGCAGCCATGCTTTTAAGGATACCGGAAAAG
CACCCGTGGAGCCGGAGGTGGCAATTCACCGAATTCGAATCACCCTAACAAGCCGCAGCGTAAAATCCTTGGAAA
AGGTGGGTGCTGACTTGATCAGAGGCGCCAAAAGCAAAGAATCTCCAAAGTGAAAGGAGGAGTTCGAATGCCTTCCA
AGACTTTGAGAATCACTACAAGAAAAACTCCTTGTGGTGAAGGTTCTAAGACGTGGGATCGTTTCCAGATGAGAA
TTCACAAGCGACTCTTTGACTTGCACAGTCCTTCTGAGATTGTTAAGCAGATTACTTCCATCAGTACTGAGCCAG
GAGTTGAGGTGGAAGTCACCATTGCAGATGCTTAAGTCAACTATTTTAATAAATTGATTACCAGTTGTT

PCT/US2003/028547

FIGURE 1333

GGAAAGACTATGTTTTAGGTGACCCGTGTGGCCTTTTTGTTGAGGCCTTTAGGATACAAGGCCCCCACCTAAAGA CGCGACCCTCCCGTAGGAGGGGGGGGGCCCGGGGGGCGGGGGCCCCAGCCTCAGGCGGCGCGTC CCCCGGTCCATTTCCGGGCTCCGGATATTTGGTATCGATTGGGGCCGGGGACGCGGAGCAGGTGGCCGCGGGG CGCTCCGTTCTCCGGCCTGCGAGCCCTGCCGGCCGGACTTTGCGCCGCGCTCCGGCGCTGCTGCTGCGCGCCTCGGGGC TCAGCATCGACCAGTCCAAGCTGCCTGGAGTCAAGGAAGTATGCCGAGATTTTGCTGTCCTGGAGGACCACACCC TGGCTCACAGCCTGCAGGAACAAGAGATTGAGCATCATTTGGCATCGAACGTTCAGCGGAACCGTTTGGTCCAGC ATGATCTCCAGGTGGCTAAGCAGCTCCAAGAGGAAGATCTGAAAGCGCAGGCCCAGCTCCAGAAGCGCTACAAAG ACCTTGAACAACAAGACTGTGAAATTGCTCAGGAAATTCAGGAGAAGCTGGCTATTGAGGCAGAGAGACGACGCA AACACTTTCCAGAGTTCCCTGCAACCCGTGCTTATGCAGATAGTTACTATTATGAAGATGGAGGAATGAAGCCAA GAGTGATGAAAGAAGCTGTATCTACTCCATCACGAATGGCCCACAGGGATCAGGAATGGTATGATGCTGAAATTG CCAGAAAACTGCAAGAAGAAGAACTTTTGGCTACCCAGGTGGACATGAGAGCCGCTCAAGTAGCTCAAGATGAAG AAATCGCTCGACTTCTAATGGCTGAAGAAAAGAAAGCTTACAAAAAAGCCAAGGAGCGGGAGAAATCATCTTTGG ACAAAAGAAAGCAAGACCCCGAGTGGAAGCCAAAAACAGCTAAAGCAGCAAATTCCAAGTCAAAAGAGAGTGATG AACCTCACCATTCTAAGAATGAAAGGCCAGCACGGCCACCACCACCTATCATGACAGATGGTGAAGATGCGGATT ACACTCATTTTACAAACCAGCAGAGTTCCACACGGCATTTCTCAAAATCAGAGTCCTCTCATAAAGGTTTTCATT ACAAACAT<u>TAA</u>AAACCTAGGAATCTGCCTTGAAAATGGACTCACTATAGCAAATATTACTGGGTGATACAGAATG AATTCTACACTTACTTTTTTTCTCCTGTGTTTGCATTCCTGGGATTTATCCTCAAGTGCATTTCTGACCATAAGT AATTTTAATTCATTTCAAATGTTTTGGTTATTCATGATCACTTGGGCAGTATAAGAAAATGTAGCTTCTGAATAT TGGCCACCTCTATGCTGCATATACTTCTTGGGATATAGTATCTAAGACCTTTGTAAACTGCCATTTTGTTAGGTA ATGTTTGGATGCAACGCAGAATAAAAGAATATAAGAAATAGCTTTTTGTTGCATTAATGTATGATATTTTGAAGG AATTGAAATATGTTATTCTGACTAGATGGACTGTAGAGGTTTTGCATTTCTCAGCCCTCCTGGGGAGATTGGCCT AGATAGCATTCTTTAACACTTCCTCTGCTTTTGCCTCAGTAGCAAGGCTTTCCTAAGCTCCTGGGCAATGGAACA CTCTTCTTTTCATTTACTTGTAGAGCCAAGGAAATGGAATTGAAAGATGATTGCATAAGTAATGATGCCATCCT TCTCTCTGGCTGTAGACTGAGGCTTTTCTCTTGCTTCAAGTCAGAGCAGTATTTGTTGATAACCTCTCAATAATG TTTGGTTTACATGCCAGTAATTAAATTAATTCAACATGAAGTTGAATTTGATGAAGTGGTCATCTATCCAAGTAT TTGGTTTTTGTTTTGTTTTTGTTTTTTGAGTTGGAGTCTCGCCCTGTCACACAGGCTGGAGTGCAGTGGTG CAATCTTGGCTCACTGCAACCTCCGCCACCTGGGCTGGAGCAATTCCCCTGCCTCAGCCTCCCAAGTAGCTGGAA TTACAGGCATGTGTCACCACCCGGCTAATTTTTGTATTTTTAGTAAAGAGCGGGTTTCACCATGTTGGCCAGG CTGGTCTCGAACCCCTGACCTCAAGTGATCCACCTGC

PCT/US2003/028547

1435/6881 FIGURE 1334

MAEVSIDQSKLPGVKEVCRDFAVLEDHTLAHSLQEQEIEHHLASNVQRNRLVQHDLQVAKQLQEEDLKAQAQLQK RYKDLEQQDCEIAQEIQEKLAIEAERRIQEKKDEDIARLLQEKELQEEKKRKHFPEFPATRAYADSYYYEDGG MKPRVMKEAVSTPSRMAHRDQEWYDAEIARKLQEEELLATQVDMRAAQVAQDEEIARLLMAEEKKAYKKAKEREK SSLDKRKQDPEWKPKTAKAANSKSKESDEPHHSKNERPARPPPPIMTDGEDADYTHFTNQQSSTRHFSKSESSHK GFHYKH

PCT/US2003/028547

1436/6881 FIGURE 1335A

CAGAGCACACAGACAAATGAATTCCTCAGTCCAGAGGTTTTCCAGCATATCTGGGATTTTCTGGAACAGCCTATA CTGAACAGCATGGACCAGCAGATTCAGAACGGCTCCTCGTCCACCAGTCCCTATAACACAGACCACGCGCAGAAC TCCAACACCGACTACCCAGGCCCGCACAGTTTCGACGTGTCCTTCCAGCAGTCGAGCACCGCCAAGTCGGCCACC TGGACGTATTCCACTGAACTGAAGAAACTCTACTGCCAAATTGCAAAGACATGCCCCATCCAGATCAAGGTGATG ACCCCACCTCCTCAGGGAGCTGTTATCCGCGCCATGCCTGTCTACAAAAAAGCTGAGCACGTCACGGAGGTGGTG AAGCGGTGCCCCAACCATGAGCTGAGCCGTGAATTCAACGAGGGACAGATTGCCCCCTCCTAGTCATTTGATTCGA GTAGAGGGGAACAGCCATGCCCAGTATGTAGAAGATCCCATCACAGGAAGACAGAGTGTGCTGGTACCTTATGAG AACCGCCGTCCAATTTTAATCATTGTTACTCTGGAAACCAGAGATGGGCAAGTCCTGGGCCGACGCTGCTTTGAG GCCCGGATCTGTGCTTGCCCAGGAAGACAGGAAGGCGGATGAAGATAGCATCAGAAAGCAGCAAGTTTCGGAC AAACGAAGATCCCCAGATGATGAACTGTTATACTTACCAGTGAGGGCCCGTGAGACTTATGAAATGCTGTTGAAG ATCAAAGAGTCCCTGGAACTCATGCAGTACCTTCCTCAGCACACAATTGAAACGTACAGGCAACAGCAACAGCAG CAGCACCAGCACTTACTTCAGAAACAGACCTCAATACAGTCTCCATCTTCATATGGTAACAGCTCCCCACCTCTG AACAAAATGAACAGCATGAACAAGCTGCCTTCTGTGAGCCAGCTTATCAACCCTCAGCAGCGCAACGCCCTCACT CCTACAACCATTCCTGATGGCATGGGAGCCAACATTCCCATGATGGGCACCCACATGCCAATGGCTGGAGACATG AATGGACTCAGCCCCACCCAGGCACTCCCCCCACTCTCCATGCCATCCACCTCCCAGTGCACACCCCCACCT ${\tt CCGTATCCCACAGATTGCAGCATTGTCAGTTTCTTAGCGAGGTTGGGCTGTTCATCATGTCTGGACTATTTCACG}$ ACCCAGGGGCTGACCACCATCTATCAGATTGAGCATTACTCCATGGATGATCTGGCAAGTCTGAAAATCCCTGAG CAATTTCGACATGCGATCTGGAAGGGCATCCTGGACCACCGGCAGCTCCACGAATTCTCCTCCCCTTCTCATCTC CTGCGGACCCCAAGCAGTGCCTCTACAGTCAGTGTGGGCTCCAGTGAGACCCGGGGTGAGCGTGTTATTGATGCT GTGCGATTCACCCTCCGCCAGACCATCTCTTTCCCACCCCGAGATGAGTGGAATGACTTCAACTTTGACATGGAT TCCTAACTGCCAGCYCCCTAAAAGCACTCCTGCTTAATCTTCAAAGCCTTCTCCCTAGCTCCTCCCCTTCCTCTT GTCTGATTTCTTAGGGGAAGGAGAAGTAAGAGGCTACCTCTTACCTAACATCTGACCTGGCATCTAATTCTGATT CTGGCTTTAAGCCTTCAAAACTATAGCTTGCAGAACTGTAGCTGCCATGGCTAGGTAGAAGTGAGCAAAAAAAGAG TTGGGTGTCTCCTTAAGCTGCAGAGATTTCTCATTGACTTTATAAAGCATGTTCACCCTTATAGTCTAAGACTA ATGAAAGAAAATTGAGTTGCACTTATTGACCATTTTTTAATTTACTTGTTTTTGGATGGCTTGTCTATACTCCTTC CTTTCAGTTCTTTGGATTCTAAATACATGCCACATCAAACCTTTGAGTAGATCCATTTCCATTGCTTATTATGTA GGTAAGACTGTAGATATGTATTCTTTTCTCAGTGTTGGTATATTTTATATTACTGACATTTCTTCTAGTGATGAT GAATGAGGAAAATTCTTAAAAGGCCCATAGCAGCCAGTTCAAAAACACCCGACGTCATGTATTTGAGCATATCAG GTATTAAAACTAAATTTCACTACTAGATTGACTAACTCAAATACACATTTGCTACTGTTGTAAGAATTCTGATTG ATTTGATTGGGATGAATGCCATCTATCTAGTTCTAACAGTGAAGTTTTACTGTCTATTAATATTCAGGGTAAATA GGAATCATTCAGAAATGTTGAGTCTGTACTAAACAGTAAGATATCTCAATGAACCATAAATTCAACTTTGTAAAA AAAAATATAAAATTATGAGATTGGTTTTCCTGTGGCATAAATTGCATCACTGTATCATTTTCTTTTTTAACCGGT AAGAGTTTCAGTTTGTTGGAAAGTAACTGTGAGAACCCAGTTTCCCGTCCATCTCCCTTAGGGACTACCCATAGA CATGAAAGGTCCCCACAGAGCAAGAGATAAGTCTTTCATGGCTGCTGTTGCTTAAACCACTTAAACGAAGAGTTC

PCT/US2003/028547

FIGURE 1335B

CCTTGAAACTTTGGGAAAACATGTTAATGACAATATTCCAGATCTTTCAGAAATATAACACATTTTTTTGCATGC ATGCAAATGAGCTCTGAAATCTTCCCATGCATTCTGGTCAAGGGCTGTCATTGCACATAAGCTTCCATTTTAATT TTAAAGTGCAAAAGGGCCAGCGTGGCTCTAAAAGGTAATGTGTGGATTGCCTCTGAAAAGTGTGTATATATTTTG GAAACCTTTTTTTATCGTTTTTGTATTTTCATGAAAATACCATTTAGTAAGAATACCACATCAAATAAGAAATAA ATGAGTCCTTGATTTCAAAGTTTTGTTGTACTTAAATGGTAATAAGCACTGTAAACTTCTGCAACAAGCATGCAG CTTTGCAAACCCATTAAGGGGAAGAATGAAAGCTGTTCCTTGGTCCTAGTAAGAAGACAAACTGCTTCCCTTACT TTGCTGAGGGTTTGAATAAACCTAGGACTTCCGAGCTATGTCAGTACTATTCAGGTAACACTAGGGCCTTGGAAA TTCCTGTACTGTGTCTCATGGATTTGGCACTAGCCAAAGCGAGGCACCCTTACTGGCTTACCTCCTCATGGCAGC CTACTCTCCTTGAGTGTATGAGTAGCCAGGGTAAGGGGTAAAAGGATAGTAAGCATAGAAACCACTAGAAAGTGG GTTAAAAGTTTTATATGCTTTATTAATGTTTTCAAAAGGTATTATACATGTGATACATTTTTTAAGCTTCAGTTG GACATGCAATAAAATTTAAAAAATAAATAAAAACTAATTAAGAAATAAA

PCT/US2003/028547

1438/6881 FIGURE 1336

MNFETSRCATLQYCPDPYIQRFVETPAHFSWKESYYRSTMSQSTQTNEFLSPEVFQHIWDFLEQPICSVQPIDLN FVDEPSEDGATNKIEISMDCIRMQDSDLSDPMWPQYTNLGLLNSMDQQIQNGSSSTSPYNTDHAQNSVTAPSPYA QPSSTFDALSPSPAIPSNTDYPGPHSFDVSFQQSSTAKSATWTYSTELKKLYCQIAKTCPIQIKVMTPPPQGAVI RAMPVYKKAEHVTEVVKRCPNHELSREFNEGQIAPPSHLIRVEGNSHAQYVEDPITGRQSVLVPYEPPQVGTEFT TVLYNFMCNSSCVGGMNRRPILIIVTLETRDGQVLGRRCFEARICACPGRDRKADEDSIRKQQVSDSTKNGDGTK RPFRQNTHGIQMTSIKKRRSPDDELLYLPVRGRETYEMLLKIKESLELMQYLPQHTIETYRQQQQQQHQHLLQKQ TSIQSPSSYGNSSPPLNKMNSMNKLPSVSQLINPQQRNALTPTTIPDGMGANIPMMGTHMPMAGDMNGLSPTQAL PPPLSMPSTSQCTPPPPYPTDCSIVSFLARLGCSSCLDYFTTQGLTTIYQIEHYSMDDLASLKIPEQFRHAIWKG ILDHRQLHEFSSPSHLLRTPSSASTVSVGSSETRGERVIDAVRFTLRQTISFPPRDEWNDFNFDMDARRNKQQRI KEEGE

PCT/US2003/028547

FIGURE 1337

PCT/US2003/028547

FIGURE 1338

ATGCCTGCTGCCACGTGGCTGGTCCTCCTCCTCCTGCTGTGGCTGAGCCTTGGGGTGAAGACAGCTTCTCAGATG ACCAAGATGGTGCTGCAGATGGTGCTGAGGATGGAGAACCCACCAAGCCCCGCTAGGAGCCACCTAGACTGGATG CAGAGCATGGAAATAAGCCTCGGTGTGGAGAGGGCCTGTCCTCAGGGCCTGGCAGATGTAGGCGATTCTTACCAC GTCTCCTTCGCTACCCCGAAAGGCACAATCATAGGCCTTTCTCGTCTTTTAAGGGTTTTTACTTCCATGGGGAAC TATGTGTTGGATGAGAAAAGTATCCGGGGAAGGGGACAGAGGTTCAGAAAGCTCTGCGAGTCCTGGACGCTGGTC TGCCTTCTTGGCTCACCCTGGAAGGTGGACGCTGGCCCCACACATCCCCTCTTAAAGACGCAGGCCGATAGCCAG CAGATCCTGGGGCTTGCTGGCCCCAAAGCAGACACTGCGATGACAACGGACGACACAGAAGTGCCCGCTATGACT CTAGCACCGGGCCACGCCGCTCTGGAAACTCAAACGCTGAGGCGCTGAGACCTCTTCTAGGGCCTCAACCCCAGCC GGCCCCATTCCAGAAGCAGAGACCAGGGGAGCCAAGAGAATTTCCCCTGCAAGAGAGACCAGGAGTTTCACAAAA ACATCTCCCAACTTCATGGTGCTGATCGCCACCTCCGTGGAGACATCAGCCGCCAGTGGCAGCCCCGAGGGAGCT GGAATGACCACAGTTCAGACCATCACAGGCAGTGATCCCAGGGAAGCCATCTTTGACACCCTTTGCACCGATGAC AGCTCTGAAGAGGCAAAGACACTCACAATGGACATATTGACATTGGCTCACACCTCCACAGAAGCTAAGGGCCTG TCCTCAGAGAGCAGCGCCTCTTCCGACAGCCCCCATCCAGTCATCACCCCGTCACGGGCCTCAGAGAGCAGCGCC TCTTCCGACGGCCCCATCCAGTCATCACCCCGTCACGGGCCTCAGAGAGCAGCGCCTCTTCCGACGGCCCCCAT CCAGTCATCACCCCGTCACGGGCCTCAGAGAGCAGCGCCTCTTCCGACGGCCCCCATCCAGTCATCACCCCGTCA CGGGCCTCAGAGAGCAGCGCCTCTTCCGACGGCCCCCATCCAGTCATCACCCCGTCACGGGCCTCAGAGAGCAGC GCCTCTTCCGACGGCCCCATCCAGTCATCACCCCGTCACGGGCCTCAGAGAGCAGCGCCTCTTCCGACGGCCCC CATCCAGTCATCACCCCGTCACGGGCCTCAGAGAGCAGCGCCTCTTCCGACGGCCCCCATCCAGTCATCACCCCG TCACGGGCCTCAGAGAGCAGCGCCTCTTCCGACGGCCCCCATCCAGTCATCACCCCGTCACGGGCCTCAGAGAGC AGCGCCTCTTCCGACGGCCTCCATCCAGTCATCACCCCGTCACGGGCCTCAGAGAGCAGCGCCTCTTCCGACGGC CCCCATCCAGTCATCACCCCGTCACGGGCCTCAGAGAGCAGCGCCTCTTCCGACGGCCCCCATCCAGTCATCACC CCCTCATGGTCCCCGGGATCTGACGTCACTCTCCTCGCTGAAGCCCTGGTGACTGTCACAAACATCGAGGTTATT AATTGCAGCATCACAGAAATAGAAACAACGACTTCCAGCATCCCTGGGGCCTCAGACACAGATCTCATCCCCACG GAAGGGGTGAAGGCCTCGTCCACCTCCGATCCACCAGCTCTGCCTGACTCCACTGAAGCAAAACCACACATCACT GAGGTCACAGCCTCTGCCGAGACCCTGTCCACAGCCGGCACCACAGAGTCAGCTGCACCTGATGCCACGGTTGGG ACCCCACTCCCCACTAACAGCGCCACAGAAAGAGAAGTGACAGCACCCGGGGCCACGACCCTCAGTGGAGCTCTG GTCACAGTTAGCAGGAATCCCCTTGAAGAAACCTCAGCCCTCTCTGTTGAGACACCAAGTTACGTCAAAGTCTCA GGAGCAGCTCCGGTCTCCATAGAGGCTGGGTCAGCAGTGGGCAAAACAACTTCCTTTGCTGGGAGCTCTGCTTCC TCCTACAGCCCCTCGGAAGCCGCCCTCAAGAACTTCACCCCTTCAGAGACACCGACCATGGACATCGCAACCAAG AGCACCTTAGCCAAGATCACAACCTCAGCGAAGACCACGATGAAGCCCCCAACAGCCACGCCCACGACTGCCCGG ACGAGGCCGACCACAGACGTGAGTGCAGGTGAAAATGGAGGTTTCCTCCTCCTGCGGCTGAGTGTGGCTTCCCCG GAAGACCTCACTGACCCCAGAGTGGCAGAAAGGCTGATGCAGCAGGAGAGGCTAACGGACATCAGCTGCAGCCAG GCATGTCCCGTATGCCAAAAGAGGGTGCTGCCCCTAGCCTGGGCCCCCACCGACAGACTGCAGCTGCGTTACTGT GCTGAGAGGTACCCAGAAGGTTCCCATGAAGGGCAGCATGTCCAAGCCCCTGACCCCAGATGTGGCAACAGGACC CTCGCTCACATCCACCGGAGTTTTGTTACATTGTACGTGCTCGAGGACAAGCAGCCGGTAGTATTCACCTCTGTC ATCACAGAAGCTGGCGTGGAGCCCTCCACATGA

PCT/US2003/028547

1441/6881 FIGURE 1339

MTTDDTEVPAMTLAPGHAALETQTLSAETSSRASTPAGPIPEAETRGAKRISPARETRSFTKTSPNFMVLIATSV ETSAASGSPEGAGMTTVQTITGSDPREAIFDTLCTDDISEEAKTLTMDILTLAHTSTEAKGLSSESSASSDGPHP VITPSRASESSASSDGLHPVITPSRASESSASSDGPHPVITPSWSPGSDVTLLAEA LVTVTNIEVINCSITEIETTTSSIPGASDTDLIPTEGVKASSTSDPPALPDSTNTKPHITEVTASAETLSTAGTT ESAAPDATIGTPLPTNSTIEREVTAPGATTLSGALATGNPLEETSALSVETPSYVKVSGAAPVSIEAGSAVGKTT SFAGSSASSYSPLEAALKNFTPSETLTTDIATKGPFPTSRAPLPSVPPTTTNSS

PCT/US2003/028547

FIGURE 1340A

ACGCCACCCTCTTCCTGTCACCAGCCTTTCCTCAGTATCCACAGGTCACGCCACCCCTCTTGCTGTCAGCAGTG CTACCTCAGCTTCCACAGTATCCTCGGACTCCCCTCTGAAGATGGAAACACCAGGAATGACAACACCGTCACTGA AGACAGACGGTGGGAGACGCACAGCCACATCACCACCCCCCACAACCTCCCAGACCATCATTTCCACCATTCCCA ATGGGGCAGGCGCGGGGACCTGGAGTTCGTCAGGAGGACCGTGGACTTCACCTCCCCACTCTTCAAGCCGGCGA CTGGCTTCCCCCTTGGCTCCTCTCCCGTGATTCCCTCTACTTCACAGACAATGGCCAGATCATCTTCCCAGAGT CAGACTACCAGATTTTCTCCTACCCCAACCCACTCCCAACAGGCTTCACAGGCCGGGACCCTGTGGCCCTGGTGG CTCCGTTCTGGGACGATGCTGACTTCTCCACTGGTCGGGGGACCACATTTTATCAGGAATACGAGACGTTCTATG GGTGGGCCCTAAAGGTCACGTGGGTCAATGCCCACGCCTATCCTGCCCAGTGGACCCTCGGGAGCAACACCTACC AAGCCATCCTCTCCACGGACGGGAGCAGGTCCTATGCCCTGTTTCTCTACCAGAGCGGTGGGATGCAGTGGGACG TGGCCCAGCGCTCAGGCAACCCGGTGCTCATGGGCTTCTCTAGTGGAGATGGCTATTTCGAAAACAGCCCACTGA TGTCCCAGCCAGTGTGGGAGAGGTATCGCCCTGATAGATTCCTGAATTCCAACTCAGGCCTCCAAGGGCTGCAGT GGCCCAGCTGGGGCTGGAACCAGGTCTCCTGCCCTTGTTCCTGGCAGCAGGGACGACGGGACTTACGATTCCAAC CCGTCAGCATAGGTCGCTGGGGCCTCGGCAGTAGGCAGCTGTGCAGCTTCACCTCTTGGCGAGGAGGCGTGTGCT GCAGCTACGGGCCCTGGGGAGAGTTTCGTGAAGGCTGGCACGTGCAGCGTCCTTGGCAGTTGGCCCAGGAACTGG AGCCACAGAGCTGGTGCTGCCGCTGGAATGACAAGCCCTACCTCTGTGCCCTGTACCAGCAGAGGCGGCCCCACG TGGGCTGTGCTACATACAGGCCCCACAGCCCGCCTGGATGTTCGGGGACCCCCACATCACCACCTTGGATGGTG GCCTGGGCCCCGTCACGGTCCAATGGCTCCTTGAGCCTCACGACGCAATCCGTGTCCTGCTGGATAACCAGACTG TGACATTTCAGCCTGACCATGAAGACGGCGGAGGCCAGGAGACGTTCAACGCCACCGGAGTCCTCCTGAGCCGCA ACGGCTCTGAGGTCTCGGCCAGCTTCGACGGCTGGGCCACCGTCTCGGTGATCGCGCTCTCCAACATCCTCCACG CCTCCGCCAGCCTCCCGCCGAGTACCAGAACCGCACGGAGGGGCTCCTGGGGGTCTGGAATAACAATCCAGAGG ACGACTTCAGGATGCCCAATGGCTCCACCATTCCCCCAGGGAGCCCTGAGGAGATGCTTTTCCACTTTGGAATGA CCTGGCAGATCAACGGGACAGGCCTCCTTGGCAAGAGGAATGACCAGCTGCCTTCCAACTTCACCCCTGTTTTCT ACTCACAACTGCAAAAAAACAGCTCCTGGGCTGAACATTTGATCTCCAACTGTGACGGAGATAGCTCATGCATCT ATGACACCCTGGCCCTGCGCAACGCAAGCATCGGACTTCACACGAGGGAAGTCAGTAAAAACTACGAGCAGCGA ACGCCACCTCAATCAGTACCCGCCCTCCATCAATGGTGGTCGTGTGATTGAAGCCTACAAGGGGCAGACCACGC TGATTCAGTACACCAGCAATGCTGAGGATGCCAACTTCACGCTCAGAGACAGCTGCACCGACTTGGAGCTCTTTG AGAATGGGACGTTGCTGTGGACACCCAAGTCGCTGGAGCCATTCACTCTGGAGATTCTAGCAAGAAGTGCCAAGA TTGGCTTGGCATCTGCACTCCAGCCCAGGACTGTGGTCTGCCATTGCAATGCAGAGAGCCAGTGTTTGTACAATC AGACCAGCAGGGTGGCCAACTCCTCCCTGGAGGTGGCTGCCAAGTGTGACGGGGGCCACCTTCGGCCGCTACT GCGAGGGCTCCGAGGATGCCTGTGAGGAGCCGTGCTTCCCGAGTGTCCACTGCGTTCCTGGGAAGGGCTGCGAGG CCTGCCCTCCAAACCTGACTGGGGATGGGCGGCACTGTGCGGCTCTGGGGAGCTCTTTCCTGTGTCAGAACCAGT CCTGCCCTGTGAATTACTGCTACAATCAAGGCCACTGCTACATCTCCCAGACTCTGGGCTGTCAGCCCATGTGCA TTCCCTTAAGAGTCATCCAGCTCTTGCTCAGTGAAGAGGAAAATGCCTCCATGGCAGAAGTCAACGCCTCGGTGG CATACAGACTGGGGACCTGGACATGCGGGCCTTTCTCCGCAACAGCCAAGTGGAACGAATCGATTCTGCAGCAC ${\tt CGGCCTCGGGAAGCCCCATCCAACACTGGATGGTCATCTCGGAGTTCCAGTACCGCCCTCGGGGCCCGGTCATTG}$ ACTTCCTGAACAACCAGCTGCTGGCCGCGGTGGTGGAGGCGTTCTTATACCACGTTCCACGGAGGAGTGAGGAGC CCAGGAACGACGTGGTCTTCCAGCCCATCTCCGGGGAAGACGTGCGCGATGTGACAGCCCTGAACGTGAGCACGC TGAAGGCTTACTTCAGATGCGATGGCTACAAGGGCTACGACCTGGTCTACAGCCCCCAGAGCGGCTTCACCTGCG TGTCCCCGTGCAGTAGGGGCTACTGTGACCATGGAGGCCAGTGCCAGCACCTGCCCAGTGGGCCCCGCTGCAGCT GTGTGTCCTTCTCCATCTACACGGCCTGGGGCGAGCACTGTGAGCACCTGAGCATGAAACTCGACGCGTTCTTCG GCATCTTCTTTGGGGCCCTGGGGGCCTCTTGCTGCTGGGGGTCGGGACGTTCGTGGTCCTGCGCTTCTGGGGTT GCTCCGGGGCCAGGTTCTCCTATTTCCTGAACTCAGCTGAGGCCTTGCCTTGAAGGGGCAGCTGTGGCCTAGGCT

PCT/US2003/028547

1443/6881 FIGURE 1340B

 ${\tt ACCTCAAGACTCACCTCATCCTTACCGCACATTTAAGGCGCCCATTGCTTTTGGGAGACTGGAAAAGGGAAGGTGACTGAAGGCTGTCAGGATTCTT}$

PCT/US2003/028547

1444/6881 FIGURE 1341

TGGGAGGTTGGGGTCTCTGGGAGCTCTGCAGGCCCCAGCACCCGCAGAGCAGACACTGCGATGACAACGGACGAC ACAGAAGTGCCCGCTATGACTCTAGCACCGGGCCACGCCGCTCTGGAAACTCAAACGCTGAGCGCTGAGACCTCT TCTAGGGCCTCAACCCCAGCCGGCCCCATTCCAGAAGCAGAGACCAGGGGAGCCAAGAGAATTTCCCCTGCAAGA GAGACCAGGAGTTTCACAAAAACATCTCCCAACTTCATGGTGCTGATCGCCACCTCCGTGGAGACATCAGCCGCC AGTGGCAGCCCGAGGGAGCTGGAATGACCACAGTTCAGACCATCACAGGCAGTGATCCCGAGGAAGCCATCTTT GACACCCTTTGCACCGATGACAGCTCTGAAGAGGCAAAGACACTCACAATGGACATATTGACATTGGCTCACACC TCCACAGAAGCTAAGGGCCTGTCCTCAGAGAGCAGTGCCTCTTCCGACGGCCCCCATCCAGTCATCACCCCGTCA CGGGCCTCAGAGAGCAGCGCCTCTTCCGACGGCCCCCATCCAGTCATCACCCCGTCACGGGCCTCAGAGAGCAGC GCCTCTTCCGACGGCCCCATCCAGTCATCACCCCGTCACGGGCCTCAGAGAGCAGCGCCTCTTCCGACGGCCCC CATCCAGTCATCACCCCGTCATGGTCCCCGGGATCTGATGTCACTCTCCTCGCTGAAGCCCCTGGTGACTGTCAC AAACATCGAGGTTATTAATTGCAGCATCACAGAAATAGAAACAACAACTTCCAGCATCCCTGGGGCCTCAGACAT AGATCTCATCCCCACGGAAGGGGTGAAGGCCTCGTCCACCTCCGATCCACCAGCTCTGCCTGACTCCACTGAAGC AAAACCACACATCACTGAGGTCACAGCCTCTGCCGAGACCCTGTCCTCAGCCCTCTCTGTTGAGACACCAAGTTA CGTCAAAGTCTCAGGAGCAGCTCCGGTCTCCATAGAGGCTGGGTCAGCAGTGGGCAAAACAACTTCCTTTGCTGG GAGCTCTGCTTCCTCCTACAGCCCCTCGGAAGCCGCCCTCAAGAACTTCACCCCTTCAGAGACACCGACCATGGA CCGAGGGACGACAGCACCTTAGCCAAGATCACAACCTCAGCGAAGACCACGATGAAGCCCCCAACAGCCACGCC CACGACTGCCCGGACGAGGCCGACCACAGACGTGAGTGCAGGTGAAAATGGAGGTTTCCTCCTCCTGCGGCTGAG TGTGGCTTCCCCGGAAGACCTCACTGACCCCAGAGTGGCAGAAAGGCTGATGCAGCAGCTCCACCGGGAACTCCA CGCCCACGCGCCTCACTTCCAGGTCTCCTTACTGCGTGTCAGGAGAGGCTAACGGACATCAGCTGCAGCCAGGCA TGTCCCGTATGCCAAAAGAGGGTGCTGCCCCTAGCCTGGGCCCCCACCGACAGACTGCAGCTGCGTTACTGTGCT GAGAGGTACCCAGAAGGTTCCCATGAAGGGCAGCATGTCCAAGCCCCTAACCCCAGATGTGGCAACAGGACCCTC GCTCACATCCACCGGAGTGTATGTATGGGGAGGGGCTTCACCTGTTCCCAGAGGTGTCCTTGGACTCACCTTGGC ACATGTTCTGTGTTTCAGTAAAGAGAGACCTGATCACCCATCTGTGTGCTTCCATCCTGCATTAAAATTCACTCA GTGTGGCCCAG

PCT/US2003/028547

FIGURE 1342

MGCLWGLALPLFFFCWEVGVSGSSAGPSTRRADTAMTTDDTEVPAMTLAPGHAALETQTLSAETSSRASTPAGPI
PEAETRGAKRISPARETRSFTKTSPNFMVLIATSVETSAASGSPEGAGMTTVQTITGSDPEEAIFDTLCTDDSSE
EAKTLTMDILTLAHTSTEAKGLSSESSASSDGPHPVITPSRASESSASSDGPHPVITPSRASESSASSDGPHPVI
TPSRASESSASSDGPHPVITPSWSPGSDVTLLAEALVTVTNIEVINCSITEIETTTSSIPGASDIDLIPTEGVKA
SSTSDPPALPDSTEAKPHITEVTASAETLSTAGTTESAAPHATVGTPLPTNSATEREVTAPGATTLSGALVTVSR
NPLEETSALSVETPSYVKVSGAAPVSIEAGSAVGKTTSFAGSSASSYSPSEAALKNFTPSETPTMDIATKGPFPT
SRDPLPSVPPTTTNSSRGTNSTLAKITTSAKTTMKPPTATPTTARTRPTTDVSAGENGGFLLLRLSVASPEDLTD
PRVAERLMQQLHRELHAHAPHFQVSLLRVRRG

WO 2004/030615 PCT/US2003/028547

1446/6881 FIGURE 1343

GGGCCGCACTGGACCAGGGATGAGAGTGGGTGCCCGGGACTCGCCTATACTGCCTGGGGGTGCAGCCCGCACTCC GTGGGCTTTGGAATATAAGCCCTTTCATCTTCTCCGCTGGTCCTCACCACGTTGGCAAGGCAGGTATTGTGACCC TGTTTTCTCAGGTGAGGACATGGAGGCTGGGAGGGGTCTAGAGACTGGCCTGGCTAGTAGGAGGCTGAGTCAGGA TTTGAACCAGCAGATCATCTGACCCCAGAGCCGGTCGTGGGCGGCACAGCGGGAGCTGCAACCGAGGCTCTTGAC TCCTGCCTCGTCATTCCCTGAGGTCCACAGGACAACCAGCTGGGGACCTGGAGCCCCATCCTGACGTCCTGGGGA GAGGTGCTAGGCCCCTTTTGGGTCTATGAGCTACTTTTGGGCCAGTGGAGCCGGGTAAAGACCATCTCAAACCCT GTGCCAGGGGAGGTCAGACTCCAAGAGCGCCACCTTTGGGCTTCCAGCTGTGTGGGCTGCACCAAGAAGGCTCAG AGAATTAGGGGGTTCGTATTTGATCCTTTCCTTCCAAGACTGGGATTACCAGATAAAACACAGGGCATCCAGTT ACATTTGAATTTCAGGTAACAATTTTTTTTTAAGTGTAAGTACGTAGCCAATATTGCATGAGAAATACTCATGCT AAAAAGTTATTCGTCATTTATCTGAACTGCGAGTTCAAATTTAACCGAGTACCCTGTATTTTTATTTGCTAAATC TAGAAACCCTCTCCAAGAGACTCCTTGGCCCACTCACAGGGAGAGCCCGATCTCCCTCTAGACAGGGGAGGCCCC CTTTCTCAGGCCAGAAAAGATCTTGTAGTAAACTACTCAAGAGGCTGAGGCAGGAGGATCGCTTGAGCCCAGGAA TCCCATTCCTCCCACCTCAGGGCCAGTCAAGGGAACAGGCCTCTGCTCTGGGCAGAAGTGCCGGCAGCCGCTCTC TGAAAAGCTAGGTGTTGCCTCAGGGGCTCCCGGTGTCCTGTGGAAAATGCCTGGCCACGGTTTCCATGGTTCCCA GGCTCCAACCCTGCAGTTCTCGGCCCTCATTCAGGAGGGGCCTCGGCAGGGTGGGGGGTGCCGTCTTTCCCTTGC CGGAGCCCCAAGGACTCTGCCGGCTCCCTCGCTTTGGCAGCACTGCCCACCCTGTCTCTGGAGGTTCCCCCG CCTCAATCCACCCAGCTACCCCGAAAGGCACAATCATAGGCCTTTCTCGTCTTTTAAGGGTTTTTACTTCCATG GGGAACTATGTGTTGGATGAGAAAAGTACCCGGGGAAGGCGACAGAGGTTCAGAAAGCTCTGCGAGTCCTGGACG $\tt CTGGTCTGCCTTCTTGGCTCACCCTGGAAGGTGGACGCTGGCCCCACACATCCCCTCTTAAAGACGCAGGCCGAT$ AGCCAGCAGATCCTGGGGCTTGCTGGCCCCAAGTGAGTTGTCAGGGTTTCAGAGGACGCCAGTCATGGCAACCCC AGCTCCATGGCTGCCACACAGGCCTGGGCTTCCCAGGACTGCCTCCTTCTTGTTCGCTTATGTAGATGAAAAATG AGGTAACGGCACTCCCTGCCCCACCCTCCCCAGAAGTGCCCAGGGTGTAAATGCAATAGCTTGTGAAGTC CACTGGAACCCAGGCTCACCAAGTCAGTCTTAACCAACACAGGCCCCAGCACCCGCAGAGCAGACACTGCGATGA CAACGGACGACACAGAAGTGCCCGCTATGACTCTAGCACCGGGCCACGCCGCTCTGGAAACTCAAACGCTGAGCG CTGAGACCTCTTCTAGGGCCTCAACCCCAGCCGGCCCCATTCCAGAAGCAGAGACCAGGGGAGCCAAGAGAATTT CCCCTGCAAGAGAGCCAGGAGTTTCACAAAAACATCTCCCAACTTCATGGTGCTGATCGCCACCTCCGTGGAGA CATCAGCCGCCAGTGGCAGCCCCGAGGGAGCTGGAATGACCACAGTTCAGACCATCACAGGCAGTGATCCCGAGG AAGCCATCTTTGACACCCTTTGCACCGATGACAGCTCTGAAGAGGCAAAGACACTCACAATGGACATATTGACAT TGGCTCACACCTCCACAGAAGCTAAGGGCCTGTCCTCAGAGAGCAGTGCCTCTTCCGACGGCCCCCATCCAGTCA TCACCCCGTCACGGGCCTCAGAGAGCAGCGCCTCTTCCGACGGCCCCCATCCAGTCATCACCCCGTCACGGGCCT CAGAGAGCAGCGCCTCTTCCGACGGCCCCCATCCAGTCATCACCCCGTCACGGGCCTCAGAGAGCAGCGCCTCTT CCGACGGCCCCATCCAGTCATCACCCCGTCACGGGCCTCAGAGAGCAGTGCCTCTTCCGACGGCCCCCATCCAG TCATCACCCCGTCACGGGCCTCAGAGAGCAGCGCCTCTTCCGACGGCCCCCATCCAGTCATCACCCCCTCATGGT CCCCGGGATCTGATGTCACTCTCCTCGCTGAAGCCCCTGGTGACTGTCACAAACATCGAGGTTATTAATTGCAGC ATCACAGAAATAGAAACAACATCCCAGCATCCCTGGGGCCTCAGACATAGATCTCATCCCCACGGAAGGGGTG GCCTCTGCCGAGACCCTGTCCACAGCCGGCACCACAGAGTCAGCTGCACCTCATGCCACGGTTGGGACCCCACTC CCCACTAACAGCGCCACAGAAAGAAGTGACAGCACCCGGGGCCACGACCCTCAGTGGAGCTCTGGTCACAGTT AGCAGGAATCCCCTGGAAGAAACCTCAGCCCTCTCTGTTGAGACACCAAGTTACGTCAAAGTCTCAGGAGCAGCT CCGGTCTCCATAGAGGCTGGGTCAGCAGTGGGCAAAACAACTTCCTTTGCTGGGAGCTCTGCTTCCTCCTACAGC CCCTCGGAAGCCGCCTCAAGAACTTCACCCCTTCAGAGACACCGACCATGGACATCGCAACCAAGGGGCCCTTC GCCAAGATCACAACCTCAGCGAAGACCACGATGAAGCCCCATCTCTACTAAAAAATACAAAAATTAGCTGGGTGTG GTGGCATGCACCTGTAGTCCCAGCTACTCGGGAGGTTGAGGCAGGAGAATCACTTGCACCAGGGAGGTGGAGGTT GCAGTGAGCCGAGATTGCGCCACTGCACTCCAGCCTGGGCAACAGAGCAAG

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PCT/US2003/028547

1447/6881 FIGURE 1344

CTTTTGAGCAGGAGTCCGGGCCCTCGTGTCACCGCTCTGAAGTCAAGGAGAGGCTGGGAGGCGGCAGAATGCAGC
CAGAGGAGGGCACAGGCTGCTGCTGAGCTGCTGTCCGAGGTGCAGCTGCAACAGTACTTCCTGCGGCTCCGAG
ATGACCTCAACGTCACCCGCCTGTCCCACTTTGAGTACGTCAAGAATGAGGACCTGGAGAAGATCGGCATGGGTC
GGCCTGGCCAGCGGCGGCGCTGTGGAGGCTGTGAAGAGGAGGAAGGCCTTGTGCAAACGCAAGTCGTGGATGAGTA
AGGTGTTCAGTGGAAAGCGACTGGAGGCTGAAGAGTCCCACCTCATCACTCTCAGAGCACCTTCCGGAAGACCTCGC
CCGCCCCTGGGGGCCCAGCAGGGGAGGGCCCCTGCAGAGCCTCACCTGCCTCATTGGGGAGAAGACCTGCGCC
TCCTGGAGAAGCTGGGTGATGGTTCCTTTGGCGTGGTGCGCAGGGCGAGTGGGACGCCCCTCAGGGAAGACCT
TGAGTGTGGCTGTGAAGTGCCTGAAGCCCGATGTCCTGAGCCAGCAGAAGCCATGGACGACTTCATCCGGGAGG
TCAATGCCATGCACTCGCTCGACCACCGAAACCTCATCCGCCTCTACGGGGTGGTGCTCACGCCGCCCATGAAGA
TGGCATCAGTTTCCCAAATTGCCTCGAGGGAGAGGCCTGAGAAACTGCAGGACTCCTAGAGGTCCCCAGACAGCA
GGCCAGGAAGGTGACAGAGCTGGCACCTCTGGGATCGTTGTTGGACCGGCTACCTAGAGCACCAGGGCCACTTCCT
CCTGGGGACTCTGAGCCGCTACGCTGTGCAGGTGGCTGAGGGCATGCTGAGAGCCCAGAGCCACTTCCT
CCTGGGGACTCTGAGCCGCTACGCTGTGCAGGTGGCTGACGGGCCTACCTGGAGTCCAAGCCCTTTATTCA
CCGTGACCTGAGCCGCAATCTGCTGTTGGCTACCCGCGACCTGGTCAAGATCGGGGACTTTTGGGCTGATGCG
AGCACTACCTCAGAATGACGACCATTACGTCATGCAGGAACATCGCAAGGTGCCCTTCGCCTGGTGTGCCCCCGA
GAGCCTGAAGACACGCACCTTCTCCCATGCCAGGGAC

PCT/US2003/028547

FIGURE 1345

TGTCTTCAGTGAAATGATACCGGTCCCCACTGCCCAGCTCACCTCCCGGGGCTGCAGGAGGCACCGGAGATAATG GCTGTAGAGGGTCTTGTAACCTGAACATTGCTTGCAAACATAAGGAATTCTAGTTACTGGGAGGAAGCACAGGGC AGAGGCCAGAAGAGGCCCTCAGATTTGAGGCACCCTAGCCCAGACGGATAAGGATCCACCAGCTCTGGGGGCGTG AGACCCAAGCTGGCAAGAATCTGCAATCTGGAGCCAAGGCTGTGGGTGCCTCAGTGGAGGCCGAGTCAGACCGAC GTGGCCAGCTTTGACCCTCATGGCCTCCTTTCTTCTGTCCCTTGACCTTCGGCTCCTCCCTGTCCACCCTGGCCT CCGAGTCTCCTCCACTTTTCCTTCCGTCTCAGCCCTCAGCTCTAGGCGCCCCTCCAGAGACCCAGCTGTCTTCCC ${\tt CAGAGAAGGGGCCAGGGCTAAAAATGGACAAGGAGGTGTCTGTGGAGGGCCCCTGCGGCTCCATCG} {\color{red} {\bf ATG}} {\tt CGGGTT}$ TGGGCGGTGCCCTCCCCACACACCTGGGTGTGGGGCCGCTCAGCCACAGGCTGCATGCCTGTCGGTCTCTT TCTGGCACCCTCCTTGAGGCCAGCATCAGGCTTTGGGTTCATGTTTGGGGGTGTGCCCTGGACGGAGTGTGGGCC TCCAGCCAGGCTGCCCCACTGACAGTTTGGCAAAACCAGGACCTATCTGGAAGCCGAAGCCGGGGATCACCAGGT GGTGTTCAGTGGAAAGCGACTGGAGGCTGAGTTCCCACCTCATCACTCTCAGAGCACCTTCCGGAAGACCTCGCC CGCCCTGGGGGCCCAGCAGGGGGGGCCCCTGCAGAGCCTCACCTGCCTCATTGGGGAGAAGGACCTGCGCCT CCTGGAGAAGCTGGGTGATGGTTCCTTTGGCGTGGTGCGCAGGGGCGAGTGGGACGCCCCTCAGGGAAGACGGT GAGCTCTCTGTGTCCTGCCAGCGCAGCAGAGGCATGGGACCCGGGGCTGGTAGTGGCTCTTCTGCCCCCAACCAG GGTGTGGATGGGACTGGGGATGCGTCACAGTGTGGCTCATCCCAGAGTCCGTGCTCAGGATTTTTTGGGGTTTTAT TTATTTATTTATTTTTGAGATGGAGTCTCGCTCTGTCGCCCAGGCTGGAGTGCAGTAGGCACGATCTCGGCTTCC TGCAACCTCCACTTTCCGGGTTCAAGCAATCCTCCTGCCTCAGCCTCCTGAGTAGCTGGGATTACAGGCATGCAC CACCACACTCAGTTAATTTTTGTATTTTTAGTAGAGACGGGGTTTCACCATGTTGGCCAGGCTGGTCTCGAACTC CTGACCTCAGATGATCTGCCCACTTTAGCCTCCCAAAGTGCTTGGATTACAGGTGTGAGCCACCACGTCCAGCCC ATGCTCAGGTTTAACTAAGCACATTTATTATTTCAACTATAAAAATAATTTATTATAAAAGTTTGGAAAGTATTT

PCT/US2003/028547

1449/6881 FIGURE 1346

 ${\tt MRVRAGVCGVAGAGREGGAGLGGDSDLGWAVPSLSTQLGVGPLSHRLHACRSLSGTLLEASIRLWVHVWGCALDGVWASSQAAPLTVWQNQDLSGSRSRGSPGGPSGVGLSD}$

PCT/US2003/028547

1450/6881 FIGURE 1347

CATCCTCCCAGAGAAGGGCCCGAATCGCCGAAGGGCACTGCTTCGCCGATTTAAAAAACAAAGCAAAAAGCCCC CAGGGAGCGGCTGCGAGCGAATGGGATAAGCGAGCCTCCAGTTCCCCGTCTTCCAGAGCAAGTGGCTTCAGTGAT ATCCAAGCGCCCTTCCAGCACCCATTCCCTGCCTCGCCAGCAGGCACCGGGGCCCCACTTGGCGTTTGCGGATTT CAGCTGAATGGGAGGCGACACAATGAGACAAGAGCAAACCGTTTCTCAGCGTTCTTGCCCAGGGCCTTCCCGTCT CGCGGCCCGGCCTCCCTCACCCGGAAGTGCTGGTCCCGGTACTGGCTCAGCTCCACGTAGGAGTCGCTGCGCAGC GCCTTCAGGAGGCCACCCGACATAGTGCAGAGAGCGGACCACAATGCGGCGACTCCCGGCACGAGGCTGCGTCC GCGATGGCGGAAGCGGAAACGCGCGGAGGCGAGCATCTCATTGGACCCAATCCGAGGGCGGCAGTGTCGTCATCA AGCTGCGCGGGGCATAGACGTCCGGGTCGGGCGCGCGGGGGGGAGACGAGGGCGGCGAGGTCGGGTTCCGGG CGCTTGGAGAAGATGGTGCTGCGGCGGCTGCTGGCCGCCTGCTGCACAGCCCGCAGCTGGTAGAACGTCTGTCA GAGTCGCGGCCTATCCGACGTGCGGCCAGCTCACGGCCTTCGCACTGCTGCAGGCCCAGCTGCGGGCCAGGAC GCCTTCACCCAGGAGCTACGCCGCGCCTCCGAGGCCGCTCGGGGCCACCACCAGGTAGCCAGAGGGGCCCTGGC TGGAGGGGTCATTCCGGGCACTGCGCGCGCTTCGAATCCCGACTGGGATTGTTGGCCTGCAGACATCCCACGCA TAAGAGCCTAGGCCAGACCGCCCGCTCCGTTGAAGTCTTGTGATTGGACAAGACACAGTGTGGAGAAAGACCCCT AAGCCTAACAGAGATGAAGGTAGGCTGGGTCCAGACACGGCACCTACGGAGGCCACGGACCGAAGCCAGAGAGC CTTTCCTCTGCAAGTGGGACTGAAACTCTTGACAGATGCTGCTCAATCTGACTGGTATAGCAGGACAGTTAATTC CAGGGACGATATGGATGAAAAGACAACCCTACAGCTGCCAAATTCCTTTGATTAAATGTGTGAGCTGGTTGATAG GCATGAGTGTGATACTTCTCAGGCAAGATGTGTTAAGAATACCGGGGACTGTAGGCCTATGGTAATAATAAACAC GTATTTTATGAAATGA

PCT/US2003/028547

FIGURE 1348

GGTCCGAGCGGGGCTCTGTGGCTCCTGGCTCTGCGCACCGTGCTCGGTGGCATGGAGGTGCGGTGGTGCGCC CTCTGCGTCCGGGGCACCTCCGCCGACCACTGCGTCCAGCTCATCGCGGCCCAGGAGGCTGACGCCATCACTCTG GATGGAGGAGCCATCTATGAGGCGGGAAAGGAGCACGGCCTGAAGCCGGTGGTGGGCGAAGTGTACGATCAAGAG GTCGGTACCTCCTATTACGCCGTGGCTGTGGTCAGGAGGAGCTCCCATGTGACCATTGACACCCTGAAAGGCGTG AAGTCCTGCCACACGGGCATCAATCGCACAGTGGGCTGGAACGTGCCCGTGGGCTACCTGGTGGAGAGCGGCCGC GAGACCAGTTACTCTGAGTCCCTCTGTCGCCTCTGCAGGGGTGACAGCTCTGGGGAAGGGGTGTGTGACAAGAGC CCCCTGGAGAGATACTACGACTACAGCGGGGCCTTCCGGTGCCTGGCGGAAGGGGCAGGGGACGTGGCTTTTGTG AAGCACAGCACGGTACTGGAGAACACGGATGAAAGTCCATCACGAAGGCAAACATGGACCAGATCTGAGGAGGAA GAAGGCGAGTGCCCTGCACACGAGGAAGCACGTAGGACGATGCGCTCTAGTGCTGGGCAAGCCTGGAAATGGGCT CCCGTTCACAGGCCCCAGGACGAGTCTGACAAAGGAGAATTTGGAAAACGGGCAAAGAGTAGGGATATGTTGGGT TAAGAATCAGCTCTTTCAAACTTGGGGTTTTTTTTGGGATGGGGGTCTCACCATGTTGCCCAGGCTGGTCTCAAA CCCCAGCCTCAACTGATCCTCGCATCTCAGCCTCCTGAGTAGCTGGGATGACAGGCGTGCACCTGGCAGCTTTT TCAAAGTGTTGATGGTAATCTGAGGCAATCTAAGGGAGTCATTTTTTAAGTGACTTTATACAGAAAGATTGGTAA GAGCCAAGGGGTAGAAGTGGCATAAATGTCTAAAGCAGGGAAGTGACAGGACTTTCATTGTTCTTGGCTGAGGAG AAGCGGGAGTGGCTGATGGAAGCACCTAAATGATGCCTTTGTCTGTGGGAAGGCAAATGATGCCCCAGAGCTCTA ACCAAAGGTTTTGCAGCCGCCGAAAAACAGGAAAGTTGGGAAGCGGGGGTAGGACTACACTGAATCATTAACAGT GCTGTAAACTACCATGTGGCCATTAACAATGACCTTTAGGGAGTTTTCCTAAACGATCACTCTGGTGCGGGTGTT TGGTTTTGTTTTAAAATAGCTTTGCAGTGAAAGCTTTCATGACCATACAAATTATCTTTTTTTCTTCCTATTTCCT

PCT/US2003/028547

1452/6881 FIGURE 1349

MRGPSGALWLLLALRTVLGGMEVRWCATSDPEQHKCGNMSEAFREAGIQPSLLCVRGTSADHCVQLIAAQEADAI TLDGGAIYEAGKEHGLKPVVGEVYDQEVGTSYYAVAVVRRSSHVTIDTLKGVKSCHTGINRTVGWNVPVGYLVES GRLSVMGCDVLKAVSDYFGGSCVPGAGETSYSESLCRLCRGDSSGEGVCDKSPLERYYDYSGAFRCLAEGAGDVA FVKHSTVLENTDESPSRRQTWTRSEEEEGECPAHEEARRTMRSSAGQAWKWAPVHRPQDESDKGEFGKRAKSRDM LG

PCT/US2003/028547

FIGURE 1350

PCT/US2003/028547

1454/6881 FIGURE 1351

 ${\tt MVLRRLLAALLHSPQLVERLSESRPIRRAAQLTAFALLQAQLRGQDAARRLQDLAAGPVGSLCRRAERFRDAFTQELRRGLRGRSGPPPGSQRGPGANI}$

PCT/US2003/028547

1455/6881 FIGURE 1352

PCT/US2003/028547

FIGURE 1353

MVMLLLLLSALAGLFGAAEGQAFHLGKCPNPPVQENFDVNKYLGRWYEIEKIPTTFENGRCIQANYSLMENGKIK VLNQELRADGTVNQIEGEATPVNLTEPAKLEVKFSWFMPSAPYWILATDYENYALVYSCTCIIQLFHVDFAWILA RNPNLPPETVDSLKNILTSNNIDVKKMTVTDQVNCPKLS

PCT/US2003/028547

1457/6881 FIGURE 1354

GCGCGAGTGGGAGGTGGCAGGCCTGCGACTCCGGCCTTGTCCGCCCCCCTCTCGGCGCGACGTCTCCAGCCATC

AACCGGTTTGGTACCCGGTTGGTGGGAGCCACGGCGACTTCTTCGCCGCCGCCGAAGGCCCGCAGCAATGAAAAC AGACTAAATAGAAGACTCCTCCAGCAAAGTGGTGCCCAGCAATTCAGGATGAGAGTGCGATGGGGAATCCAACAG AATTCTGGTTTTGGTAAGACTAGTCTGAATCATAGAGGAAGAGTAATGCCTGGAAAGAGACGTCCTAATGGAGTT ATCACTGGCCTTGCAGCTAGGAAAACGACTGGAATTCGAAAAGGAATTAGTCCTATGAATCGTCCACCTCTAAGT AAACCAGTAGCAGTTCTCAAGAGACCTAGCCAGCTAAGCAGAAAAAATAACATTCCAGCTAATTTTACCAGGAGT GGAAATAAATTAAATCATCAGAAAGATACTCGTCAGGCAACTTTTCTTTTCAGAAGAGGCCTGAAGGTGCAGGCC CAGTTGAATACAGAACAACTGCTAGACGATGTAGTAGCAAAGAGAACTCGTCAATGGCGGACTTCCACCACAAAT GGAGGGATTTTGACTGTATCTATTGACAATCCTGGAGCAGTGCAATGCCCAGTAACTCAGAAACCACGATTAACT CGTACTGCTGTACCTTCATTTTTAACAAAGCGGGAGCAAAGTGACGTCAAGAAAGTTCCTAAAGGTGTTCCCCTG CAGTTTGACATAAACAGTGTCGGAAAACAGACAGGGATGACGTTGAATGAGCGGTTTGGGATCCTGAAGGAACAA AGAGCCACTCTCACATACAACAAAGGGGGAAGCCGCTTTGTCACCGTGGGATAGGTCCCATGTCAAAGGAACTTT TGAGTGATGACTCTGAGAAGTTGAATTGCTTGAAGAGTTCATCACGGAAATTCAAGAAACTTTACTTCAAAAATAT ATTCAGGATCTCATCACCTTTGCCCGTGTTTTAGACTTTGTCATGGTAAATCCTGGTCTTCATAAACATGAGTAG GTCCCTTGGTTGCTGTCACTTGCCCTTTAATAGTGTTGATGTAGTCAGTGCCGTTGCCTTTTCTTCATTAGAGAC ACAGAACAATGTATTAGAATTTCCAGCTGTGGGTTTGAAGACTTAGGGGGACATCCAGAACGTGCTTCCTCTTTC AGACGGTGTAAAGTCCCCTGGAATTACACAGCTTTAGTGCTGAGCTTTTAACAGGAAATGTGGCCCTAGGTATTA GTCTTAGTTTAAAATGTTGGTGTTTAGAGACTGTAAATGCATATTCACAAAGTTATCTGATAGGGCCTTGGAGGA GGACAGGTAGTTGAGATGAAACACTTCAAAACCCTGGTTATAGATGTACTGTTTGGATGTAGCATAGTCTTGAGT CTAGCGTCCACAAGAATTATTCAAATGATATTTAGAAGAATTATAACTATTACATTGAATGGAGTCCCTTGGAT ATTTTGATAGTAAAATTAATAGCCATAAAGTCCTAGACTTCTTATTTGAAGTTAAAATTTCTTATTTGAAAAGTT GAAATTTATGAGCTTTGAAGATTGCTAAATTAAATAATTATAGCTCCAAAAACAAAAATATACTTGTATATGTC ACAGAGAAAAAAATGCAAAATTTATAATAGAGTTACATTAACCTTGTTGTTTACCTTTCACTGATTTCTTATAT GGTATAAATTAAAGTTCAGGCATTTATGGGGAGAAAAGGCCCTCCCCACCGACCCGCCACCTGCCACCTCTGACG GAGTGGGAGAAGTTAGTCTGTGCTAAGATAGTACTGAGTCCCCAGATGTTGTATACTGTAAATTACAGTATAATG CCAAATGCAGCAAAATCTTCCAGCTGTACGTTACAAGTTTTGGTCATTTTGAAGCTTGACATTTTAGTTTGCCATT ATGTTAAAAACATCTAAATAGGTGTTAGTTTCTCAGGAGTAGATTGTTAGTGTTGACTTTTCCTGTAAAGCAGAC ATCGTTCTTGGCCTGCCTGCATTGTATACTAGATTTCATTGTTGTCTCTCATGCTTCTTGAGTTGCTTCATGGT TTATGCTCGCCATGGAAAGCTATCAGTAACAGTTTCATGCTTATACCAAAGAATTAAATCTGATCTTTAATATCT CTCCTTAGCTATTTGATGCTTTTCATATAGGCCAAGAACTCATTGCAAAACATTTTTGCAAGGATGAATGCCTGT ATTTGGTCTAGGAACAGTACATTTTAGTCTGATTTAGAATTACTGGTAGCTTATTTTAAAGCAAGGAAAAGCAGC TGAGCTCAAGTTTGCTGTCTTTAGAATGGTTTGTGAAAATATGGTATAAAGGTGTTTTCATTTTCCTGTTCTTAC CTATTATTGTATAGAGCTATTCATGCCATTTTTTGGGAAAACTTTAAAAATTGCCCCAAATACTGACATTGAGTG CATTAAATAACAAATTATCTTTGATACATTAAACTTTTATTCTTCATGCATCTGTAATTTAATTTTAAGTATAAT GTTTTGCCTTTGGTACAACTAAATTAAAACTCTTGGTGGTCACATATTGTATATAAACAAAACAATATGCTTTGT TGAAGGAAAATTTTCTTTATTGGAATGTGGTTGTAATCCTTGTTCAGTTCTTAAGTTTCGGTTTTTTTAAAAAAC AGGATGCAACTTAAACTTTTCTTTGCATCAAGGTATATGCAAAACATTGGTGCCGTGCATCACCAAATGAAAGTT TGTATTTAACGAGGAGGTGCTTTACACTGTACTTTTTGGTGTTTTTTTGGAAAAGTTACATTTAGATCTATTCTGA AAA

PCT/US2003/028547

1458/6881 FIGURE 1355

MNRFGTRLVGATATSSPPPKARSNENLDKIDMSLDDIIKLNRKEGKKQNFPRLNRRLLQQSGAQQFRMRVRWGIQ QNSGFGKTSLNHRGRVMPGKRRPNGVITGLAARKTTGIRKGISPMNRPPLSDKNIEQYFPVLKRKANLLRQNEGQ RKPVAVLKRPSQLSRKNNIPANFTRSGNKLNHQKDTRQATFLFRRGLKVQAQLNTEQLLDDVVAKRTRQWRTSTT NGGILTVSIDNPGAVQCPVTQKPRLTRTAVPSFLTKREQSDVKKVPKGVPLQFDINSVGKQTGMTLNERFGILKE QRATLTYNKGGSRFVTVG

PCT/US2003/028547

1459/6881 FIGURE 1356

AATCAAGAGGTTCCAATCTTCGTGTTCACTTTAAGAACACTCGTGGAACTGCTCAGGCCACCAAGGGTATGCATA
TACGAAAAGCCACGAAGTATCTGAAAGATGTCACTTTACAGAAACAGCGTGTACCATTCCGACGTTACAATGATG
GAGTTGGCAGGTGTGCGCAGGCCAAGCAGTGGGGCTGGACACAAGGTCGGTGGCCCAGAAAGAGTGCTGAATTCT
CTGGTCATTGAGCATATCCAAGTGAACAAAGCACCTGAGATGTGCCGCCGGACCTACAGAGCTCATGGTCGGATT
AACCCATACATGAGCTCTCCCTGCCACATTGAGATGATCCTTATGGAAAAGGAACAGATTGTTCCTAAACCAGAA
GAGGAGGTTGCCCAGAAGAAAAAGATATCCCAGAAGAAACTGAAGAAAAACTTACGGCACGGGAGTAAATT
CAGCATTAAAATAAATGTAATTAAAAGG

PCT/US2003/028547

1460/6881 FIGURE 1357

MSLYRNSAYHSDVTMVELASVRRPSSGAGHKVGGPKRVLNSLVIEYIQVNKAPKMLRRTYRAHGRINSYMSSPWH IEMILTEKEQIVPKPEKEVAQKKKISQKKLKKQKLMARK

PCT/US2003/028547

FIGURE 1358

PCT/US2003/028547

FIGURE 1359

PCT/US2003/028547

1463/6881 FIGURE 1360

PCT/US2003/028547

FIGURE 1361

PCT/US2003/028547

FIGURE 1362

 ${\tt MQIFVKTLTGKTITLEVEPSDTIENVKAKIQGKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLHLVLRLLV}\\ {\tt VLRKGRRSLTPLPRRISTRERRLSWLS}$

PCT/US2003/028547

1466/6881 FIGURE 1363

CCCGCCGCTAATGTTTTGGCCGCTTCAAGATGGCGGTGCAGGAGTCGGCGGCTCAGTTGTCCATGACCCTGAAG GTCCAGGAGTACCCGACCCTCAAGGTGCCCTACGAGACGCTGAACAACGCTTTCGCGCCGCTCAGAAGAACATT GACCGGGAGACCAGCCACGTCACCATGGTGGTGGCCGAGCTGGAGAAGACGTTGAGCGGCTGCCCCGCCGTGGAC GCCGAGGACGAGGCGCCAAGCTGTGCAAGCGCCGGATCGAGCACCTCAAAGAGCATAGCAGCGACCAGCCGCG GCGGCCAGCGTGTGGAAGAGGAAGCGCATGGATCGCATGATGGTGGAGCACCTGCTGCGTTGCGGCTACTACAAC ACGGCTGTCAAGCTGGCGCCCCAGAGCGGCATCGAGGACCTAGTGAATATTGAGATGTTCCTGACGGCCAAAGAG AAGATGAAGAGCTGCCTGGAGTTCAGCCTCAGAATCCAGGAGTTCATTGAACTCATCCGGCAGAATAAGAGACTG GACGCTGTGAGACATGCAAGAAAGCACTTCAGCCAAGCAGAAGGGAGCCAGCTGGACGAGGTGCGCCAGGCCATG GGCATGCTGGCCTTCCCGCCGACACGCACATCTCCCCGTACAAGGACCTTCTGGACCCTGCACGGTGGCGGATG CTGATCCAGCAGTTCCGGTACGACAACTACCGACTACACCAGCTGGGAAACAATTCTGTGTTCACCCTCACCCTG CAGGCTGGCCTCTCAGCCATCAAGACACCACAGTGCTACAAGAGGCGGCAGCTCCAAGAGCCCTGACTGCCCT GTGTGCAGCCGCTCCCTGAACAAGCTGGCGCAGCCCCTGCCCATGGCCCACTGTGCCAACTCCCGCCTGGTCTGC AAGATTTCTGGCGACGTGATGAACGAGAACAATCCGCCCATGATGCTGCCCAACGGCTACGTCTACGGCTACAAT TCTCTGCTTTCTATCCGTCAAGATGATAAAGTCGTGTGCCCGAGAACCAAAGAAGTCTTCCACTTCTCACAAGCC GAGAAGGTGTACATCATGTAGGCCCCACGTCGTGAAGCGCACGCCTCGGGGACGGCTGCAGTGGGCGGGGAGGC ${\tt CACGCCTTCCTGTCCCACGCTCCAGCCTGCCGCGGCGTTTCTGTTTCTTGCGACCAAAGATCCGTGAGCAAC}$ GATAAATACTCTTAGGAAGAGAAAATAAGGTTTCATAAGTTTGTACTTGAAAACATTTGGATTGGTAGGATTT TGTAACACGTCAACCATTTGATGCTTCTGAAAAGTACTTTCAACTTGCGAAGGAAACTCTTCTTTAAAGACTGAC TTCTGTGAACGATGAGACTTGGAGAACGGGCTGGTCCTTCACCACTTCCTGTTGGCCCTGGCCTGGCCGGGGAAG GTGGCAGCGGCACCGGACTGACCTGCAGTGACCCGCGATGCCGCCCACGAGGGACACTTATGGCTTCATTCGAG GTCCGCGGGACTGTGTTCGTACGTGCATAGTTTCGATATCACATCGCGGGGCTGTGTTCGTAGCTGCGTCGTTTC GATATCACACCCTCTGTGTGCCGCCTTACTTCCTGCTTCGAGAATGTATAACGTGGAAATCCACGGGACCAAATT TCTGCAGAGGCCTTGCCGGATGGTTCCATAACTGTAGAGTCTAATTGCTATCCATTACAGAAATTAATCGTTCAG TTGAAAGAAGTACTGATGACTTTCAAAACAAATGAACCACCGTAGCTGACAGAGAACCGTATCGTAGAGGTTTG TAGTTAGTGCTTATTTTTGCATGTTGATGTTGACTAGCTAATAAACTGTAAATGTAAACCATGCGAATAAAATGG TTTTCTATTTCTC

PCT/US2003/028547

FIGURE 1364

CTTCCCGCCGCCGCCGCCCCGAGGCCCCCAAAGATGGCGGACAAGGTGGTCCCACGGCAGGTGGCCCGGCT GGGCCGCACTGTGCGGCTGCAGTGCCCAGTGGAGGGGGACCCGCCGCCGCTGACCATGTGGACCAAGGATGGCCG CACCATCCACAGCGGCTGGAGCCGCTTCCGCGTGCTGCCGCAGGGGCTGAAGGTGAAGCAGGTGGAGCGGGAGGA TGCCGGCGTGTACGTGTGCAAGGCCACCAACGGCTTCGGCAGCCTGAGCGTCAACTACACCCTCGTCGTGCTGGA GTGGGCACGACCGCGCTTCACACAGCCCTCCAAGATGAGGCGCCGGGTGATCGCACGGCCCGTGGGTAGCTCCGT GCGGCTCAAGTGCGTGGCCAGCGGGCACCCTCGGCCCGACATCACGTGGATGAAGGACGACCAGGCCTTGACGCG CCCAGAGGCCGCTGAGCCCAGGAAGAAGAAGTGGACACTGAGCCTGAAGAACCTGCGGCCGGAGGACAGCGGCAA ATACACCTGCCGCGTGTCGAACCGCGCGCGCCCCTACAACGCCACCTACAAGGTGGATGTGATCCAGCGGACCCG TTCCAAGCCCGTGCTCACAGGCACGCACCCCGTGAACACGACGGTGGACTTCGGGGGGGACCACGTCCTTCCAGTG CAAGGTGCGCAGCGACGTGAAGCCGGTGATCCAGTGGCTGAAGCGCGTGGAGTACGCGCCGAGGGCCGCCACAAC TCCACCATCGATGTGGGCGGCCAGAAGTTTGTGGTGCTGCCCACGGGTGACGTGTGGTCGCGGCCCGACGGCTCC TACCTCAATAAGCTGCTCATCACCCGTGCCCGCCAGGACGATGCGGGCATGTACATCTGCCTTGGCGCCAACACC ATGGGCTACAGCTTCCGCAGCGCCTTCCTCACCGTGCTGCCAGACCCAAAACCGCCAGGGCCACCTGTGGCCTCC TCGTCCTCGGCCACTAGCCTGCCGTGGCCCGTGGTCATCGGCATCCCAGCCGGCGCTGTCTTCATCCTGGGCACC CCGCCGGGGACGCCCGCGACCGCGAGACAAGGACCTTCCCTCGTTGGCCGCCCTCAGCGCTGGCCCTGGT GTGGGGCTGTGTGAGGAGCATGGGTCTCCGGCAGCCCCCAGCACTTACTGGGCCCAGGCCCAGTTGCTGGCCCT GACAGGCAGACTGGGAGGATGGAGGACGGAGCTGCAGACGAAGGCAGGGGACCCATGGCGAGGAGGAATGGCCAG TATGCACACACGCGCACACGTGCTCCCTGAAGGCACACGTACGCACACACGCACATGCACAGATATGCCGC CTGGGCACACAGATAAGCTGCCCAAATGCACGCACACGCACAGAGACATGCCAGAACATACAAGGACATGCTGCC GCACACGTGCAGATATGGTATCCGGACACACGTGCACAGATATGCTGCCTGGACACACAGATAATGCTGCC ACACACATGCAGATATGCTGCCTGGACACACTTCCAGACACACGTGCACAGGCGCAGATATGCTGCCTGGACA CGTGCAGATATTGCCTGGACACACACATGTGCACAGATATGCTGTCTGGACATGCACACACGTGCAGATATGCTG TGCAGATATGCTGCCTGGACACACGCAGACTGACGTGCTTTTTGGGAGGGTGTGCCGTGAAGCCTGCAGTACGTGT GCCGTGAGGCTCATAGTTGATGAGGGACTTTCCCTGCTCCACCGTCACTCCCCCAACTCTGCCCGCCTCTGTCCC CGCCTCAGTCCCCGCCTCCGCCTCTGTCCCCTGGCCTTGGCGGCTATTTTTGCCACCTGCCTTGGGTGC CCAGGAGTCCCTACTGCTGTGGGCTGGGGTTGGGGGCACAGCACCCCAAGCCTGAGAGGCTGGAGCCCATGGC TAGTGGCTCATCCCCACTGCATTCTCCCCCTGACACAGAGAGGGGCCTTGGTATTTATATTTAAGAAATGAAGA TAATATTAATAATGATGGAAGGAAGACTGGGTTGCAGGGACTGTGGTCTCTCCTGGGGCCCGGGACCCGCCTGGT CTTTCAGCCATGCTGATGACCACACCCCGTCCAGGCCAGACACCACCCCCACCCCACTGTCGTGGTGGCCCCAG CCTTTCCCTCC

PCT/US2003/028547

FIGURE 1365

CCAAAGATGTTGACCAGGAAGATCAAGCTGTGGGACATCAACGCCCACATCACCTGCCGCCTGTGCAGCGGGTAC
CTCATCGACGCCACCACGGTGACCGAGTGTCTGCACACCTTCTGCAGGAGCTGCCTGGTGAAGTACCTGGAGGAG
AACAACACCTGCCCCACCTGCAGGATTGTGATCCACCAGAGCCACCCCCTGCAGTACATCGGTCATGACAGAACC
ATGCAAGATATTGTTTACAAATTGGTACCAGGCCTCCAAGAAGCGGAAATGAGAAAGCAGAGGGAGTTCTATCAC
AAATTGGGCATGGAGGTGCCGGGAGACATCAAGGGGGAGACCTGCTCTGCAAAACAGCACTTAGATTCCCATCGG
AATGGTGAAACCAAAGCAGACGACAGTTCAAACAAAGAGGCCGCGGAGGAGAAGCCGGAGGAGGACAACGACTAC
CACCGCAGCGACGAGCAGGTGAGCATCTGCCTGGAGTGTAACAGCAGCAAACTGCGCGGGGCTGAAGCGGAAGTGG
ATCCGCTGCTCAGCCCAGGCGACCGTCTTGCATCTGAAGAAGATTCATCGCCAAAAAAACTCAACCTTTCATCCTTT
AACGAGCTGGACATTTTATGCAACGAGGAGATCCTGGGCAAGGACCACACCTCAAGTTCGTGGTTGTCACTAGG
TGGAGATTCAAGAAGGCGCCCCTCTGCTGCACTACAGACCCAAGATGGACTTGCTGTGAATGGTGCCACACACGC
GCCCACAGACTGGGCCCTCGCACCCTTGGGTGCTCCCGGCCGCCGCCGCTTAAGAACATTGCCTCTGGGTGTCATG
TGGACCAGACTTCTGAATAGAGAATATTTATAACTTTTTGTATGAGAGAG

PCT/US2003/028547

1469/6881 FIGURE 1366

PCT/US2003/028547

1470/6881 FIGURE 1367

 ${\tt MVPPVQVSPLIKLGRYSALFLGVAYGATRYNYLKPRAEEERRIAAEEKKKQDELKRIARELAEDDSILK}$

PCT/US2003/028547

FIGURE 1368

PCT/US2003/028547

1472/6881 FIGURE 1369

MASRKTKKKEGGALRAQRASSNVFSNFEQTQIQEFKEAFTLMDQNRDGFIDKEDLKDTYASLGKTNVKDDELDAM LKEASGPINFTMFLNLFGEKLSGTDAEETILNAFKMLDPDGKGKINKEYIKRLLMSQADKMTAEEVDQMFQFASI DVAGNLDYKALSYVITHGEEKEE

PCT/US2003/028547

FIGURE 1370

CGGGGCCGACGGAGCCGAGACGGGGTTGGCCGAGCCCCGGGCCCTGTGCGCGCAGCGGGGCCACCGCACCTACG CGCGCCGCTGGGTGTTCCTGCTCGCGATCAGCCTGCTCAACTGCTCCAACGCCACGATCAACTGGCTGTCACTGG TCTACCTCGTGGTATCCACCCCATTTGGCGTGGCGGCCATCTGGATCCTGGACTCCGTCGGGCTCCGTGCGGCGC TCGGTGTCTATACCATCCCTGCTGGCGTCGTCTGCCTGCTGTCCACCATCTGCCTGTGGGAGAGTGTGCCCCCCA CCCCGCCCTCTGCCGGGGCTGCCAGCTCCACCTCAGAGAAGTTCCTGGATGGGCTCAAGCCGCAGCTCATGTGGA ACAAGGCCTATGTCATCCTGGCTGTGTGCTTGGGGGGAATGATCGGGATCTCTGCCAGCTTCTCAGCCCTCCTGG AGCAGATCCTCTGTGCAAGCGGCCACTCCAGTGGGTTTTCCGGCCTCTGTGGCGCTCTCTTCATCACGTTTGGGA TCCTGGGGGCACTGGCTCTCGGCCCCTATGTGGACCGGACCAAGCACTTCACTGAGGCCACCAAGATTGGCCTGT GCCTGTTCTCTGGCCTGCGTGCCCTTTGCCCTGGTGTCCCAGCTGCAGGGACAGACCCTTGCCCTGGCTGCCA CCGTGGGGGAGGGGCTGCCACAGGCATGATCTTTGTGCTGGGGCAGGCCGAGGGAATACTCATCATGCTGGCAA TGACGGCACTGACTGTGCGACGTCGGAGCTGTCCTTGTCCACCTGCCAGCAGGGGGAGGATCCACTTGACTGGA CAGTGTCTCTGCTGCTGATGGCCGGCCTGTGCACCTTCTTCAGCTGCATCCTGGCGGTCTTCTTCCACACCCCAT ACCGGCGCCTGCAGGCCGAGTCTGGGGAGCCCCCCTCCACCCGTAACGCCGTGGGCGGCGCAGACTCAGGGCCGG GTGTGGACCGAGGGGGGCAGGAAGGGCTGGGGTCCTGGGGCCCAGCACGCGACTCCGGAGTGCACGGCGAGGG $\tt CGGCTGGGTCTCACTCCTCCTCCCCGTGGGTGATCACG\underline{TAG}CTGAGCGCCTTGTAGTCCAGGTTGCCCG$

PCT/US2003/028547

FIGURE 1371

MAGPTEAETGLAEPRALCAQRGHRTYARRWVFLLAISLLNCSNATINWLSLVYLVVSTPFGVAAIWILDSVGLRA ALGVYTIPAGVVCLLSTICLWESVPPTPPSAGAASSTSEKFLDGLKPQLMWNKAYVILAVCLGGMIGISASFSAL LEQILCASGHSSGFSGLCGALFITFGILGALALGPYVDRTKHFTEATKIGLCLFSLACVPFALVSQLQGQTLALA ATCSLLGLFGFSVGPVAMELAVECSFPVGEGAATGMIFVLGQAEGILIMLAMTALTVRRSELSLSTCQQGEDPLD WTVSLLLMAGLCTFFSCILAVFFHTPYRRLQAESGEPPSTRNAVGGADSGPGVDRGGAGRAGVLGPSTATPECTA RGASLEDPRGPGSPHPACHRATPRAQGPAATDAPSRPGRLAGRVQASRFIDPAGSHSSFSSPWVIT

WO 2004/030615 PCT/US2003/028547

FIGURE 1372

GGCACGAGGGGTTCCGTTTCCGGAGTGGAGGGCACGCCAGGGTGTCTGAAGCTGAGACCCCGGGCTCGCAGTCGC CCCATGAATTTCGAGTTCCGCAACTGACGCTACTGGGCGGGGCTTCATGGCCAGGGCCTCAGGCCTAAGTT CGCGATGGACAGCCCCGAGGTGACCTTCACTCTCGCCTATCTGGTGTTCGCCGTGTGCTTCGTGTTCACGCCCAA GCCCTTCCACTTGCGCCGCACGGCCACGCTGTTGTGCCACTCGCTGCCGCCTCGGCTACTACGTGGGCAT GTGCCTTGCGGCTTCAGAAAAGCGGCTCCACGCCCTCAGCCAGGCCCTGAGGCCTGGCGGCTCTTCCTGCTGCT AACCACCTACCGAGTGCACGTGGCCCAGCAGCAGCACGTGCACCTGACTGTGACGGAGTCTCGGCAGCATGAGCT $\tt CTCGCCAGACTCGAACTTGCCCGTGCAGCTCCTCACCATCCGTGTGGCCAGCACCAACCCTGCTGTGCAGGCCTT$ TGACATCTGGAGCTGGAGGCCTGCATACGCTGCATGCAGACACGTGCCAGCGTGAAGCTGGTGAAGACCTGCCAG GAGGCAGCCACAGGCGAGTGCCAGCAGTGTTACTGCCGCCCCATGTGGTGCCTCACCTGCATGGGCAAGTGGTTC TTCTGCATCCTGGATGTGTGCACCGTGCGCTGAGTGGGCCTGGGGCCTTGAGGTGACTCTGTGTCTCCCCGCAAAG ACTCGCCTCTGCCCTGGGTCTGCAGAAGGCTGAGGACTTTTGGTTAAAAGCAATCCTCATGAAAACACCCCACCC TGCTTGGCAGCCAGGGTACAAGTCCTGGGCACCTCCTCTTTGCCTCCTCCTGCCCCTTTCCTGCTGGTGGGGGC AGATCCTGCACACACACACACCGTCTGCCCCCGAGCCATTCCCTGGAGACCCTGGGTCTACCCCAGGTGGTCG TCATCTGGGCCATTTGCCTTACTTCTCTGGAGCATACCCACCTCAGTTACGTGCCAGACCTGGACCGCATTCTC CTGCCCTGTCCTGGAGCTGGCCCCTGGCTGCCTGGAGGACCCTGGGTAGGTCCTGAGGGTGGGATGGAGAAGAGG GTGGCAATGGGAGGACAGGTCAGAGCGCCCTCATTTGTGGGGCTGCCCCTCCGGGTTTCTCATCCTGTCCTTGGT GCCTTTTTCTGCCCAACAGTCCAGGGAAGGCCGAGGTCTCAGACTCCTGGGTAGGGGTGGGGGTTTGAGTTGAG GACCAAAGTGCCATAGCGACATCCAGAACACAAGCCCACCAGGGGTCCAGCCCAGGCTACCCACTCCCCTAGGGT CTCCCAGGCTCAGAAGGGGATGCACGCCCCCTGTGGTCAAGCCTCTGGTGGGCGTCTTGCCCAGTTCCTGATGGT TCAAGGGGAGGGGGATGTTGGCCAGGCCCCAGGGCACAGCCCTGACAGGTGTGGCTACTGGAGGGGCCTTCA TACCTGCGGCCCCAAAGCCCCTGGGCTTGGCTGTTTGAGGCAGAGGTGATGGACTCCGGGGGCCTGACACTTGGG ATTTGGGAGGCTTCCTAGAGCGCTCAGCAGGTGAAGGCAGGGGCCATGGCCGGGAGCCAGGCCTAGCTTTGA ACTGAGTTTCAAGGGCTGCCAAAGAGGGGCAGTGGGTTGGGGTTGTTTTTACTACAAAATAAGTTACTTAGTTTT AAAAAA

PCT/US2003/028547

FIGURE 1373

MDSPEVTFTLAYLVFAVCFVFTPNEFHAAGLTVQNLLSGWLGSEDAAFVPFHLRRTAATLLCHSLLPLGYYVGMC LAASEKRLHALSQAPEAWRLFLLLAVTLPSIACILIYYWSRDRWACHPLARTLALYALPQSGWQAVASSVNTEFR RIDKFATGAPGARVIVTDTWVMKVTTYRVHVAQQQDVHLTVTESRQHELSPDSNLPVQLLTIRVASTNPAVQAFD IWSWRPA

PCT/US2003/028547

FIGURE 1374

 ${\tt GGCTCAGAGCCCGGCAACGGGCGGGCGGGCAGA} {\tt ATG} {\tt AGTCTGCAGGTCTTAAACGACAAAAATGTCAGCAATGAA}$ AAAAATACAGAAAATTGCGACTTCCTGTTTTCGCCACCAGAAGTTACCGGAAGATCGTCTGTTCTTCGTGTGTCA CAGAAAGAAATGTGCCACCCAAGAACCTGGCCAAAGCTATGAAGGTGACTTTTCAGACACCTCTGCGGGATCCA CAGACGCACAGGATTCTAAGTCCTAGCATGGCCAGCAAACTTGAGGCTCCTTTCACTCAGGATGACACCCTTGGA CTGGAAAACTCACACCGGTCTGGACACAGAAAGAGAACCAACAGCTCATCAAGGAAGTGGATGCCAAAACTACT CATGGAATTCTACAGAAACCAGTGGAGGCTGACACCGACCTCCTGGGGGATGCAAGCCCAGCCTTTGGGAGTGGC ${\tt AGCTCCAGCGAGTCTGGCCCAGGTGCCCTGGCTGACCTGGACTGCTCAAGCTCTTCCCAGAGCCCAGGAAGTTCT}$ GAGAACCAAATGGTGTCTCCAGGAAAAGTGTCTGGCAGCCCTGAGCAAGCCGTGGAGGAAAACCTTAGTTCCTAT TCCTTAGACAGAAGAGTGACACCCGCCTCTGAGACCCTAGAAGACCCTTGCAGGACAGAGTCCCAGCACAAAGCG GAGACTCCGCACGGAGCCGAGGAAGAATGCAAAGCGGAGCTCCGCACGGAGCCGAGGAGGAATGCCGGCACGGT GGGGTCTGTGCTCCCGCAGCAGTGGCCACTTCGCCTCCTGGTGCAATCCCTAAGGAAGCCTGCGGAGGAGCACCC CTGCAGGGTCTGCCTGGCGAAGCCCTGGGCTGCCGGGTGTGGGCACCCCCGTGCCAGCAGATGGCACTCAG ACCCTGAGTCCTCAGGAAGAAGTGGCTGCAGGCCAAATGGCCAGCTCCTCGAGGAGCGGACCTGTAAAACTAGAA TTTGATGTATCTGATGGCGCCACCAGCAAAAGGGCACCCCCACCAAGGAGACTGGGAGAGAGGTCCGGCCTCAAG CCTCCCTTGAGGAAAGCAGCAGTGAGGCAGCAAAAGGCCCCGCAGGAGGTGGAGGACGACGGTAGGAGCGGA GCAGGAGAGGACCCCCCCATGCCAGCTTCTCGGGGCTCTTACCACCTCGACTGGGACAAAATGGATGACCCAAAC TTCATCCCGTTCGGAGGTGACACCAAGTCTGGTTGCAGTGAGGCCCAGCCCCCAGAAAGCCCTGAGACCAGGCTG GGCCAGCCAGCGGCTGAACAGTTGCATGCTGGGCCTGCCACGGAGGAGCCAGGTCCCTGTCTGAGCCAGCAGCTG CATTCAGCCTCAGCCGAGGACACGCCTGTGGTGCAGTTGGCAGCCGAGACCCCAACAGCAGAGAGCAAGGAGAGA CAGCCTGCCTTGGAGCTGAAAGAGGAGAGCTTCAGAGACCCCGCTGAGGTTCTAGGCACGGGCGCGGAGGTGGAT TACCTGGAGCAGTTTGGAACTTCCTCGTTTAAGGAGTCGGCCTTGAGGAAGCAGTCCTTATACCTCAAGTTCGAC CCCCTCCTGAGGGACAGTCCTGGTAGACCAGTGCCCGTGGCCACCGAGACCAGCAGCATGCACGGTGCAAATGAG ACTCCCTCAGGACGTCCGCGGGAAGCCAAGCTTGTGGAGTTCGATTTCTTGGGAGCACTGGACATTCCTGTGCCA GGCCCACCCCAGGTGTTCCCGCGCCTGGGGGCCCACCCCTGTCCACCGGACCTATAGTGGACCTGCTCCAGTAC AGCCAGAAGGACCTGGATGCAGTGGTAAAGGCGACACAGGAGGAGAACCGGGAGCTGAGGAGCAGGTGTGAGGAG CTCCACGGGAAGAACCTGGAACTGGGGAAGATCATGGACAGGTTCGAAGAGGTTGTGTACCAGGCCATGGAGGAA GTTCAGAAGCAGAAGGAACTTTCCAAAGCTGAAATCCAGAAAGTTCTAAAAGAAAAAGACCAACTTACCACAGAT CTGAACTCCATGGAGAAGTCCTTCTCCGACCTCTTCAAGCGTTTTGAGAAACAGAAAGAGGTGATCGAGGGCTAC CGCAAGAACGAAGAGTCACTGAAGAAGTGCGTGGAGGATTACCTGGCAAGGATCACCCAGGAGGGCCAGAGGTAC CAAGCCCTGAAGGCCCACGCGGAGGAGAAGCTGCAGCTGGCAAACGAGGAGATCGCCCAGGTCCGGAGCAAGGCC GAGCAGAAGACTAAAGAGAACGAGGAGCTGACCAGGATCTGCGACGACCTCATCTCCAAGATGGAGAAGATC<u>TGA</u>

PCT/US2003/028547

1478/6881 FIGURE 1375

MSLQVLNDKNVSNEKNTENCDFLFSPPEVTGRSSVLRVSQKENVPPKNLAKAMKVTFQTPLRDPQTHRILSPSMA SKLEAPFTQDDTLGLENSHPVWTQKENQQLIKEVDAKTTHGILQKPVEADTDLLGDASPAFGSGSSSESGPGALA DLDCSSSSQSPGSSENQMVSPGKVSGSPEQAVEENLSSYSLDRRVTPASETLEDPCRTESQHKAETPHGAEEECK AETPHGAEEECRHGGVCAPAAVATSPPGAIPKEACGGAPLQGLPGEALGCPAGVGTPVPADGTQTLTCAHTSAPE STAPTNHLVAGRAMTLSPQEEVAAGQMASSSRSGPVKLEFDVSDGATSKRAPPPRRLGERSGLKPPLRKAAVRQQ KAPQEVEEDDGRSGAGEDPPMPASRGSYHLDWDKMDDPNFIPFGGDTKSGCSEAQPPESPETRLGQPAAEQLHAG PATEEPGPCLSQQLHSASAEDTPVVQLAAETPTAESKERALNSASTSLPTSCPGSEPVPTHQQGQPALELKEESF RDPAEVLGTGAEVDYLEQFGTSSFKESALRKQSLYLKFDPLLRDSPGRPVPVATETSSMHGANETPSGRPREAKL VEFDFLGALDIPVPGPPPGVPAPGGPPLSTGPIVDLLQYSQKDLDAVVKATQEENRELRSRCEELHGKNLELGKI MDRFEEVVYQAMEEVQKQKELSKAEIQKVLKEKDQLTTDLNSMEKSFSDLFKRFEKQKEVIEGYRKNEESLKKCV EDYLARITQEGQRYQALKAHAEEKLQLANEEIAQVRSKAQAEALALQASLRKEQMRIQSLEKTVEQKTKENEELT RICDDLISKMEKI

PCT/US2003/028547

FIGURE 1376A

TGGTCTTGAACTCCTGACCTTGTGATCCGCTCGCCTCAGCCTCCCAAAGTGCTGGGATTACAGGCATGAGCCACC GTGCCTGTCCTAGAACCACTGGTAACTCTTAACTGAGACAAGATTTCGCCATGTTGCCCAGGCTGGTCTCGAACT TCTGAGCTCAAGCGATCTACCTGCCTCGTCCTCCCAAAGTGTTGGAATTGCAGGTGTGAGCCACTGCACCCGGCC CTTGCCTCATGTTTGAATGATAATTTACCTGGGCATAAAATTCTGGACACTTGTGGTGGCACGAGCTGTCTGCTT TTCTGTGGAGACTGCGGGTTGCAGACACCAGCAGCCCCCTATTGCTGCACGTCAGGTGTCCTCCACCTCAGTACT GTGGACATCTCGGGCCGCATAGCCCTGTTGCGCGGGCATCCTGTGCGTTGCAGGAGATGCAGCAGCATCCATGAC ${\tt CGCAACCCATCAGAGTGTTCTAAGAACGGAAGCATCTGGGCTGG}$ CTGTTCAGAGTGTTGTAAAGTGCATAAAGATGAAGCAGGCACCAGAAATCCTCGGCAGTGCCAACGGGAAGACTC CGAGCTGCGAGGTGAACCGCGAGTGTTCTGTGTTCCTCAGCAAAGCCCAGCTCTCCAGTAGCCTGCAGGAGGGGG TCATGCAGAAGTTTAACGGCCACGACGCCCTGCCCTTTATTCCAGCCGACAAGCTGAAAGATCTTACTTCCCGGG TGTTTAATGGAGAACCCGGCGCACACGATGCCAAACTGCGTTTTGAGTCCCAGGAAATGAAAGGGATTGGGACAC CAGAAAACAAGGCGAGAAGGAACAGGAAGAGGGGCATAAAATATGACTCCTTGCTGGAGCAGGGCCTTGTCGAAG GAAGAGACAAAGACCACCTGTTGAAATACAACGTTGGTGATTTGGTGTGGTCCAAAGTGTCGGGTTACCCTTGGT GGCCTTGCATGGTTTCTGCAGATCCACTCCTTCACAGCTATACCAAACTTAAAGGTCAGAAAAAAAGAGTGCACGCC AGTATCACGTACAGTTCTTTGGTGACGCCCCAGAAAGAGCTTGGATATTTGAGAAGAGCCTCGTAGCTTTTGAAG GAGAAGGACAGTTTGAAAAATTATGCCAGGAAAGTGCCAAGCAGGCACCCACGAAAGCTGAGAAAATTAAGCTAT TGAAACCAATTTCAGGGAAATTGAGGGCCCAGTGGGAAATGGGCATTGTTCAAGCAGAAGAAGCTGCAAGCATGT CAGTGGAGGAGCGGAAAGCCAAGTTCACCTTTCTCTATGTGGGGGACCAGCTTCATCTCAACCCTCAAGTAGCCA AGGAGGCTGGCATTGCTGCAGAGTCTTTGGGAGAAATGGCAGAATCCTCAGGAGTCAGTGAAGAAGCTGCTGAAA ACCCCAAGTCTGTGAGAGAGAGTGCATTCCCATGAAGAGAGGCGGAGGGCCAAACTGTGTAGCTCTGCAGAGA CCCTGGAGAGTCACCCCGACATAGGGAAGAGTACTCCTCAAAAGACGGCAGAGGCTGACCCCAGAAGAGAGGAGTAG GGTCTCCTCCTGGGAGGAAGAAGACCACAGTCTCCATGCCACGAAGCAGGAAGGGAGATGCAGCATCCCAGTTTT TGGTCTTCTGTCAAAAACACAGGGATGAGGTGGTAGCTGAGCACCCAGATGCTTCAGGTGAGGAGATTGAAGAGC TGCTCAGGTCACAGTGGAGTCTGCTGAGTGAGAAGCAGAGAGCACGCTACAACACCAAGTTTGCCCTGGTGGCCC CTGTCCAGGCTGAAGAAGACTCTGGTAATGTAAATGGGAAAAAAAGAAACCACACAAAGAGGGATACAGGACCCTA CAATCACTGACAAAACGGCCAGAACAAGCTCTTACAAGGCCATGGAGGCAGCCTCCTCGCTCAAGAGCCAGGCAG CAACGAAAAATCTGTCTGATGCATGTAAACCACTGAAGAAGCGAAATCGGGCTTCCACGGCAGCATCTTCAGCTC TTGGGTTTAGCAAAAGTTCATCTCCTTCTGCATCCTTAACTGAGAATGAGGTCTCGGACAGCCCGGGAGACGAGC CCTCGGAGTCCCCATACGAAAGTGCAGACGAAACACAAACTGAAGTATCTGTCTCATCCAAAAAGTCTGAGCGAG GAGTGACTGCCAAAAAGGAGTATGTGTGCCAGCTGTGTGAGAAGCCGGGCAGCCTCCTGCTCTGTGAAGGACCCT GCTGCGGAGCTTTCCACCTCGCCTGCCTTGGGCTTTCCCGGAGGCCAGAAGGGAGGTTCACCTGCAGCGAGTGTG CCTCAGGGATTCACTCATGTTTCGTGTGTAAAGAGAGCAAGACAGATGTTAAGCGCTGTGTGGTAACTCAGTGTG GAAAATTTTACCATGAGGCTTGTGTGAAAAAATACCCTCTGACTGTATTTGAGAGCCGAGGTTTCCGCTGCCCCC TCCACAGCTGTGTGAGCTGCCATGCTTCCAACCCTTCAAACCCAAGGCCGTCAAAAGGTAAAATGATGCGGTGTG TCCGCTGCCCCGTTGCCTATCACAGCGGGGATGCTTGTCTGGCAGCAGGATGCTCAGTGATCGCCTCCAACAGCA TCATCTGCACTGCCCACTTCACTGCTCGGAAGGGGAAGCGACACCACGCCCACGTCAACGTGAGCTGGTGCTTCG TGTGCTCCAAAGGGGGGAGCCTTCTGTGCTGTGAGTCCTGCCCAGCGGCCTTCCACCCTGACTGCCTGAACATCG AGATGCCTGACGGCAGCTGGTTCTGCAATGACTGCAGGGCTGGGAAGAAGCTGCACTTCCAGGATATCATTTGGG TGAAACTTGGGAACTACAGATGGTGGCCGGCAGAAGTTTGCCATCCCAAAAATGTTCCCCCAAATATTCAGAAAA TGAAGCACGAGATTGGAGAATTCCCTGTGTTTTTCTTTGGGTCTAAAGATTATTACTGGACGCATCAGGCGCGAG TGTTCCCGTACATGGAGGGGGACCGGGGCAGCCGCTACCAGGGGGTCAGAGGGATCGGAAGAGTCTTCAAAAACG GCAAGCCCCCACCATACAAGCACATCAAGGTGAATAAGCCTTACGGGAAAGTCCAGATCTACACAGCGGATATTT CAGAAATCCCTAAGTGCAACTGCAAGCCCACAGATGAGAATCCTTGTGGCTTTGATTCGGAGTGTCTGAACAGGA

PCT/US2003/028547

FIGURE 1376B

TGCTGATGTTTGAGTGCCACCCGCAGGTGTGTCCCGCGGGCGAGTTCTGCCAGAACCAGTGCTTCACCAAGCGCC AGTACCCAGAGACCAAGATCATCAAGACAGATGGCAAAGGGTGGGGCCTGGTCGCCAAGAGGGGACATCAGAAAGG AGAACGACATCACCCACTTCTACATGCTCACTATAGACAAGGACCGTATAATAGACGCTGGCCCCAAAGGAAACT ACTCTCGATTTATGAATCACAGCTGCCAGCCCAACTGTGAGACCCTCAAGTGGACAGTGAATGGGGACACTCGTG TGGGCCTGTTTGCCGTCTGTGACATTCCTGCAGGGACGGAGCTGACTTTTAACTACAACCTCGATTGTCTGGGCA ATGAAAAAACGGTCTGCCGGTGTGGAGCCTCCAATTGCAGTGGATTCCTCGGGGATAGACCAAAGACCTCGACGA CCCTTTCATCAGAGGAAAAGGGCAAAAAGACCAAGAAGAAAACGAGGCGCGCAGAGCAAAAGGGGAAGGGAAGA GGCAGTCAGAGGACGAGTGCTTCCGCTGCGGTGATGGCGGCAGCTGGTGCTGTGTGACCGCAAGTTCTGCACCA AGGCCTACCACCTGTCCTGCCTGGGCCTTGGCAAGCGGCCCTTCGGGAAGTGGGAATGTCCTTGGCATCATTGTG ACGTGTGTGGCAAACCTTCGACTTCATTTTGCCACCTCTGCCCCAATTCGTTCTGTAAGGAGCACCAGGACGGGA CAGCCTTCAGCTGCACCCCGGACGGCCGTCCTACTGCTGTGAGCATGACTTAGGGGCGGCATCGGTCAGAAGCA GGGAGAGGGCGAGCATGAACTGGCCCGGAGGACCCAGCTCGAGCCGCCAGGACACAGACGTACAGGCCTCCTCGG GAGGGAGCGCCTCCCCACCACTGAGCCATCCTCAGCAGCGTCCGCTGCGCTCTGCACTGATGACCGTCTGAGCCCA GCTCAGCGTTCCTGGACAAACAGCCTCACTCCTCAGCGTTACCGCCACACTTGAATTTCTCCGAATGTCAAGGTT CCCTCCCACTCTATTTTTTTAGGTTAAAGTTAATTGGCATATGGAATGTTTTAATCTCCTCTGAAATGTGTAGCG TAGGCTTTTCCCAAGGGTCGCTAGAAACTCGTCTTCGCGTTGCCCCCTTTCTGGCTCTCAGCGCCGTCGCCACTC GGGAGAGGCTGGGTGAGGCCCGTGTGAGGACTGACCCTGGATTCCTCGAAACTGCCATTGTGATCATTACTCTGC TCTTTGGAAATGGCTGTATCATTTTTTGTACTAATGTGAATTGTTCCTCAGAAACGCTTCTTTTCCATCCTAGT GAGAAGCTGGCCCTGCAGGTGGTGGCAGCAATGGTGTTGTAAGATTTCCTCCCGTAGTTTTTTCTCCTCATGGAT TTGAATGAAATGCCAATAACACGTCCACTTTCAACGTGTAGTTTACGCGGAGCACTTTCGAGGCCTGGCCGGGTT GGGCCTACTTCTCACCTGGGCCTATCTTCTGAACTCGCTAGGTTCTTATCAACATTTGGGGGGATAACTTTGTATA TTTTTTCATTTGGCTTTTCTTTACCAGTTTCTGATTTTTATTCTCAATATATTTTTGCTAAACCTATTTCACAA ATCACCACCGACTGAAGTGTGTTTTACTGATGCGGCCCTGAGCTCCATGGCGAAAGGAGTGACTTTGCAGGGCG TGAGACCGCAGTCTGCTTAGAGCACAGGAAGTGACAACTTAGGGAGCCCCGTAGGGCGCTGCAGGCCCCGGGGAC CCCAGCACGTGGGTCTAAAGAGAGACGGAGTCTAGCTCTCCTGCCACCCAGAGTGGCTTCCATCTCAGCACTCTG TGGGTCTGGTGATGGAAGATGCAGTCTCTGCTGATCACATGTGCCCTCTGCCAGGGCACCTACTGAGAGGTGCGG TCCTGGGGGTGGAGGCCTGCCTGGCAGGTGTGCGTGCCTCGTACGTGTTATGGGCACTGGTCTAGGCCAGGTA GAGTACTACATATGTTTTAAGACTTGGTTCTTTTTTTGAGGGATCCTTGACCCTGGGAAGTCTGGAGCACCCTGA AGAACTCCCCTTGAAAACTGCTGCTGAGGCTCCTGTTAAATTTTCTGTGGCATCTTTTATGCCTTGGTAAAAACT GCAGTGTCTTTGGACCTGAGAGTGGCTACTCCGTGGTTTTGTGACCTGTAAGCGTGGGGTTCAGGGGTGTGTGGC GTCCCCAGCAAAGTTAACTACACAGAGGACCCAGGGGAAACGAGCTGTGTAGCCACTGACTTGCTCGCGCGGCCG TGGCCTCTGAGGGGCACTCGCCGGTTAAGACAGGGTGGGAGTAGTGCTTTCCAGTTCAGACTCTAACTTCTCCCA AAGTGTCCTAAGAAAATACTGGATCGGCTCATAGATTTATGCTCCTTATGATGCCCCTAACTTGGAAGGTTGTTCT AGGGACAGGCCGGGCAGTGTCCCCACACACACCTTAGAGTCGAAGGCCCCAGGGCCCCGCTGTCACTTGCCCAAA AGATCCCTTCCGGCAGGTAAGGGACTACCAATGCTTACGTCAAAACAGCAGAATCGGCTTTGCAGTGCACTTTGG GGAGCAGATATTAACTTATTTTTGTGTTGGACAGTAGTGAAATCTTGTGATTTTTAATCGCTTTGATAATACTTC CAAATTTTATGATTTTCTGAAGGAAATAATGCAAACATTTTAAATATGTTTCTCCCCCTTTCCAAAAACTGTTA AACTAATGAGCAAGTAACACTAACTTTGAATGTCTCTACAATACCCGTTGATAACTCAGTGGAGCCAGGCTTTGG GGTAGCGGCCCTGAGCTTGCAGGGTTTCTCGCCACTGGGGCTGACCACGCCCCCAGCTGTGACCGTGGGTGTGGC TGGCTCTCGGCCCTGCCCAGCTTTGTTCTGAGGACGTGGTGACTTCCTGAACATCAGCTTCAATCCTCCATCATT AATGTGAAGCAAAACCACAAAAACCGCCCCAATCCCTCAGGATTCCTTGGCATCCGAAACCAGCATCTGCACCTAA

PCT/US2003/028547

FIGURE 1376C

PCT/US2003/028547

FIGURE 1377

MEFSIKQSPLSVQSVVKCIKMKQAPEILGSANGKTPSCEVNRECSVFLSKAQLSSSLQEGVMQKFNGHDALPFIP ADKLKDLTSRVFNGEPGAHDAKLRFESQEMKGIGTPPNTTPIKNGSPEIKLKITKTYMNGKPLFESSICGDSAAD VSQSEENGQKPENKARRNRKRSIKYDSLLEQGLVEAALVSKISSPSDKKIPAKKESCPNTGRDKDHLLKYNVGDL VWSKVSGYPWWPCMVSADPLLHSYTKLKGQKKSARQYHVQFFGDAPERAWIFEKSLVAFEGEGQFEKLCQESAKQ APTKAEKIKLLKPISGKLRAQWEMGIVQAEEAASMSVEERKAKFTFLYVGDQLHLNPQVAKEAGIAAESLGEMAE SSGVSEEAAENPKSVREECIPMKRRRRAKLCSSAETLESHPDIGKSTPQKTAEADPRRGVGSPPGRKKTTVSMPR SRKGDAASQFLVFCQKHRDEVVAEHPDASGEEIEELLRSQWSLLSEKQRARYNTKFALVAPVQAEEDSGNVNGKK RNHTKRIQDPTEDAEAEDTPRKRLRTDKHSLRKRDTITDKTARTSSYKAMEAASSLKSQAATKNLSDACKPLKKR NRASTAASSALGFSKSSSPSASLTENEVSDSPGDEPSESPYESADETQTEVSVSSKKSERGVTAKKEYVCQLCEK PGSLLLCEGPCCGAFHLACLGLSRRPEGRFTCSECASGIHSCFVCKESKTDVKRCVVTQCGKFYHEACVKKYPLT VFESRGFRCPLHSCVSCHASNPSNPRPSKGKMMRCVRCPVAYHSGDACLAAGCSVIASNSIICTAHFTARKGKRH HAHVNVSWCFVCSKGGSLLCCESCPAAFHPDCLNIEMPDGSWFCNDCRAGKKLHFQDIIWVKLGNYRWWPAEVCH PKNVPPNIQKMKHEIGEFPVFFFGSKDYYWTHQARVFPYMEGDRGSRYQGVRGIGRVFKNALQEAEARFREIKLQ REARETQESERKPPPYKHIKVNKPYGKVQIYTADISEIPKCNCKPTDENPCGFDSECLNRMLMFECHPQVCPAGE FCQNQCFTKRQYPETKIIKTDGKGWGLVAKRDIRKGEFVNEYVGELIDEEECMARIKHAHENDITHFYMLTIDKD RIIDAGPKGNYSRFMNHSCQPNCETLKWTVNGDTRVGLFAVCDIPAGTELTFNYNLDCLGNEKTVCRCGASNCSG FLGDRPKTSTTLSSEEKGKKTKKKTRRRRAKGEGKRQSEDECFRCGDGGQLVLCDRKFCTKAYHLSCLGLGKRPF GKWECPWHHCDVCGKPSTSFCHLCPNSFCKEHQDGTAFSCTPDGRSYCCEHDLGAASVRSTKTEKPPPEPGKPKG KRRRRRGWRRVTEGK

PCT/US2003/028547

FIGURE 1378A

TGGTCTTGAACTCCTGACCTTGTGATCCGCTCGCCTCAGCCTCCCAAAGTGCTGGGATTACAGGCATGAGCCACC GTGCCTGTCCTAGAACCACTGGTAACTCTTAACTGAGACAAGATTTCGCCATGTTGCCCAGGCTGGTCTCGAACT TCTGAGCTCAAGCGATCTACCTGCCTCGTCCTCCCAAAGTGTTGGAATTGCAGGTGTGAGCCACTGCACCCGGCC CTTGCCTCATGTTTGAATGATAATTTACCTGGGCATAAAATTCTGGACACTTGTGGTGGCACGAGCTGTCTGCTT TTCTGTGGAGACTGCGGGTTGCAGACACCAGCAGCCCCCTATTGCTGCACGTCAGGTGTCCTCCACCTCAGTACT GTGGACATCTCGGGCCGCATAGCCCTGTTGCGCGGGCATCCTGTGCGTTGCAGGAGATGCAGCATCCATGAC ${\tt CGCAACCCATCAGAGTGTTCTAAGAACGGAAGCATCTGGGCTGG} \underline{{\tt ATG}} {\tt GAATTTAGCATCAAGCAGAGTCCCCTTT}$ CTGTTCAGAGTGTTGTAAAGTGCATAAAGATGAAGCAGCACCAGAAATCCTCGGCAGTGCCAACGGGAAGACTC CGAGCTGCGAGGTGAACCGCGAGTGTTCTGTGTTCCTCAGCAAAGCCCAGCTCTCCAGTAGCCTGCAGGAGGGGG TCATGCAGAAGTTTAACGGCCACGACGCCCTTCATTCCAGCCGACAAGCTGAAAGATCTTACTTCCCGGG TGTTTAATGGAGAACCCGGCGCACACGATGCCAAACTGCGTTTTGAGTCCCAGGAAATGAAAGGGATTGGGACAC CAGAAAACAAGGCGAGAAGGAACAGGAAGAGGAGCATAAAATATGACTCCTTGCTGGAGCAGGGCCTTGTCGAAG GAAGAGACAAAGACCACCTGTTGAAATACAACGTTGGTGATTTGGTGTGGTCCAAAGTGTCGGGTTACCCTTGGT AGTATCACGTACAGTTCTTTGGTGACGCCCCAGAAAGAGCTTGGATATTTGAGAAGAGCCTCGTAGCTTTTGAAG GAGAAGGACAGTTTGAAAAATTATGCCAGGAAAGTGCCAAGCAGGCACCCACGAAAGCTGAGAAAATTAAGCTAT TGAAACCAATTTCAGGGAAATTGAGGGCCCAGTGGGAAATGGGCATTGTTCAAGCAGAAGAAGCTGCAAGCATGT CAGTGGAGGAGCGGAAAGCCAAGTTCACCTTTCTCTATGTGGGGGACCAGCTTCATCTCAACCCTCAAGTAGCCA AGGAGGCTGGCATTGCTGCAGAGTCTTTGGGAGAAATGGCAGAATCCTCAGGAGTCAGTGAAAGATGCTGAAA CCCTGGAGAGTCACCCCGACATAGGGAAGAGTACTCCTCAAAAGACGGCAGAGGCTGACCCCAGAAGAGGAGTAG GGTCTCCTCCTGGGAGGAAGAAGACCACAGTCTCCATGCCACGAAGCAGGAAGGGAGATGCAGCATCCCAGTTTT TGGTCTTCTGTCAAAAACACAGGGATGAGGTGGTAGCTGAGCACCCAGATGCTTCAGGTGAGGAGATTGAAGAGC TGCTCAGGTCACAGTGGAGTCTGCTGAGTGAGAAGCAGAGAGCACGCTACAACACCAAGTTTGCCCTGGTGGCCC CAATCACTGACAAAACGGCCAGAACAAGCTCTTACAAGGCCATGGAGGCAGCCTCCTCGCTCAAGAGCCAGGCAG CAACGAAAAATCTGTCTGATGCATGTAAACCACTGAAGAAGCGAAATCGGGCTTCCACGGCAGCATCTTCAGCTC TTGGGTTTAGCAAAAGTTCATCTCCTTCTGCATCCTTAACTGAGAATGAGGTCTCGGACAGCCCGGGAGACGAGC CCTCGGAGTCCCCATACGAAAGTGCAGACGAAACACAAACTGAAGTATCTGTCTCATCCAAAAAGTCTGAGCGAG GAGTGACTGCCAAAAAGGAGTATGTGTGCCAGCTGTGTGAGAAGCCGGGCAGCCTCCTGCTCTGTGAAGGACCCT GCTGCGGAGCTTTCCACCTCGCCTTGGGCTTTCCCGGAGGCCAGAAGGGAGGTTCACCTGCAGCGAGTGTG CCTCAGGTGTCGCCCGGCACAGTCTGGGGTCTGTGAGGATGATGAGAGGACACCTGCACAGCCGTGGCCCTTCCT GCCTACTCACCGGGCCCAAGGAGTCTCCTATCTCACGTCAGAACACTTCCTGGGTCAGGAAGACACCTGGAGAGT ${\tt ACTGCTCCACCACTGGCCAGCTGCTCTCAAGGAGGAAAGGCCTCTTTTCA} \underline{{\tt TAG}} {\tt GAGCCCCTTCTTTCAAGCTTCT}$ TGCCAGTTAGACTGGGCCTCCCCAGCCAGGCTGCCTAGTAAGATTCTCCTGTATTTCAGGTGAAGCTGGAGCTCA GATCGCAGCAAGGTAATCCTTGATGGCTGGATCTTTTTGCTGGAGAATGCTTGGACTAGTGAGCAAGGTTGGAAA ${\tt CAGGGCCAGGTGCTTTAGCAGCGTGGCTGCCTCTGAAGAGGAGTTGCTTGATTTTAGTGGCTCAGAACTGCAATT}$ TAATTCTTGTTCTTTGCACCTCTCTCCACCCCTTCTTTAACTTTTTGTTAGGGATTCACTCATGTTTCGTGTG TAAAGAGAGCAAGACAGATGTTAAGCGCTGTGTGGTAACTCAGTGTGGAAAATTTTACCATGAGGCTTGTGTGAA AAAATACCCTCTGACTGTATTTGAGAGCCGAGGTTTCCGCTGCCCCCCCACAGCTGTGTGAGCTGCCATGCTTC CAACCCTTCAAACCCAAGGCCGTCAAAAGGTAAAATGATGCGGTGTCCGCTGCCCCGTTGCCTATCACAGCGG GGATGCTTGTCTGGCAGCAGGATGCTCAGTGATCGCCTCCAACAGCATCATCTGCACTGCCCACTTCACTGCTCG GAAGGGGAAGCGACACCACGCCAACGTGAGCTGGTGCTTCGTGTGCTCCAAAGGGGGGAGCCTTCTGTG

PCT/US2003/028547

FIGURE 1378B

CTGTGAGTCCTGCCCAGCGGCCTTCCACCCTGACTGCCTGAACATCGAGATGCCTGACGGCAGCTGGTTCTGCAA TGACTGCAGGGCTGGGAAGAAGCTGCACTTCCAGGATATCATTTGGGTGAAACTTGGGAACTACAGATGGTGGCC GGCAGAAGTTTGCCATCCCAAAAATGTTCCCCCAAATATTCAGAAAATGAAGCACGAGATTGGAGAATTCCCTGT GTTTTCTTTGGGTCTAAAGATTATTACTGGACGCATCAGGCGCGAGTGTTCCCGTACATGGAGGGGGACCGGGG CAGCCGCTACCAGGGGGTCAGAGGGATCGGAAGAGTCTTCAAAAACGCACTGCAAGAAGCTGAAGCTCGTTTTCG GGTGAATAAGCCTTACGGGAAAGTCCAGATCTACACAGCGGATATTTCAGAAATCCCTAAGTGCAACTGCAAGCC CACAGATGAGAATCCTTGTGGCTTTGATTCGGAGTGTCTGAACAGGATGCTGATGTTTGAGTGCCACCCGCAGGT GTGTCCCGCGGGCGAGTTCTGCCAGAACCAGTGCTTCACCAAGCGCCAGTACCCAGAGACCAAGATCATCAAGAC AGATGGCAAAGGGTGGGGCCTGGTCGCCAAGAGGGACATCAGAAAGGGAGAATTTGTTAACGAGTACGTTGGGGA CACTATAGACAAGGACCGTATAATAGACGCTGGCCCCAAAGGAAACTACTCTCGATTTATGAATCACAGCTGCCA GCCCAACTGTGAGACCCTCAAGTGGACAGTGAATGGGGACACTCGTGTGGGCCTGTTTGCCGTCTGTGACATTCC TGCAGGGACGGAGCTGACTTTTAACTACAACCTCGATTGTCTGGGCAATGAAAAAACGGTCTGCCGGTGTGGAGC CTCCAATTGCAGTGGATTCCTCGGGGATAGACCAAAGACCTCGACGACCCTTTCATCAGAGGAAAAAGGGCAAAAA GACCAAGAAGAAAACGAGGCGCGCGCAGAGCAAAAGGGGGAAGGGAAGAGGCAGTCAGAGGACGAGTGCTTCCGCTG TGGCAAGCGGCCCTTCGGGAAGTGGGAATGTCCTTGGCATCATTGTGACGTGTGTGGCAAACCTTCGACTTCATT TTGCCACCTCTGCCCCAATTCGTTCTGTAAGGAGCACCAGGACGGGACAGCCTTCAGCTGCACCCCGGACGGGCG GTCCTACTGCTGTGAGCATGACTTAGGGGCGGCATCGGTCAGAAGCACCAAGACTGAGAAGCCCCCCCAGAGCC AGGGAAGCCGAAGGGGAAGAGGCGGCGGAGGGGCTGGCGGAGAGTCACAGAGGGCAAATAGCGCCAGGCGGC TCCTCAGCAGCGTCCGCTGCGCTCTGATGACCGTCTGAGCCCAGCTCAGCGTTCCTGGACAAACAGCCTCA GTTAATTGGCATATGGAATGTTTTAATCTCCTCTGAAATGTGTAGCGTAGGCTTTTCCCAAGGGTCGCTAGAAAC TCGTCTTCGCGTTGCCCCCTTTCTGGCTCTCAGCGCCGTCGCCACTCGGGAGAGGCTGGGTGAGGCCCGTGTGAG GACTGACCCTGGATTCCTCGAAACTGCCATTGTGATCATTACTCTGCTCTTTGGAAATGGCTGTATCATTTTTTT GTACTAATGTGAATTGTTCCTCAGAAACGCTTCTTTTCCATCCTAGTGAGAAGCTGGCCCTGCAGGTGGTGGCAG TTTCAACGTGTAGTTTACGCGGAGCACTTTCGAGGCCTGGCCGGGTTGGGCCTACTTCTCACCTGGGCCTATCTT CTGAACTCGCTAGGTTCTTATCAACATTTGGGGGATAACTTTGTATATTTTTTTCATTTGGCTTTTCTTTACCAG TGATGCGGCCCTGAGCTCCATGGCGAAAGGAGTGACTTTGCAGGGCGTGAGACCGCAGTCTGCTTAGAGCACAGG AAGTGACAACTTAGGGAGCCCCGTAGGGCGCTGCAGGCCCCGGGGACCCCAGCACGTGGGTCTAAAGAGAGACGG AGTCTAGCTCTCCTGCCACCCAGAGTGGCTTCCATCTCAGCACTCTGTGGGTCTGGTGATGGAAGATGCAGTCTC TGTGCGTGCCTCGTACGTGTTATGGGCACTGGTCTAGGCCAGGTATGACACCCACTCTCCTGTGAGATTTCAC TCTTTTTTTGAGGGATCCTTGACCCTGGGAAGTCTGGAGCACCCTGAGAAGGGGGGCACCATGTGTGCCTTTGCCC ACGTGTCCTGAGGGGCTGCTTGTCTGGGAGGGAGGAGAACATTCAGCAGCAGGTGCTTTTTATGGCCTTTT CTTAAAATAACCTAAGGGGGACACATCCATCTTGCAGAGAAGTTTACAGAACTCCCCTTGAAAACTGCTGCTGAG GCTCCTGTTAAATTTTCTGTGGCATCTTTTATGCCTTGGTAAAAACTGCAGTGTCTTTGGACCTGAGAGTGGCTA CTCCGTGGTTTTGTGACCTGTAAGCGTGGGGTTCAGGGGTGTGTGGGCCCTGCAGGGTCCCACGCCTCCCTGAGCA CTGACTGGAAGTTTCACTGGCTGGTGGCTGTCCCTTCTCCCATCAGGGTCCCCAGCAAAGTTAACTACACAGAGG ACCCAGGGGAAACGAGCTGTGTAGCCACTGACTTGCTCGCGCGGCCGTGGCCTCTGAGGGGCACTCGCCGGTTAA GACAGGGTGGGAGTAGTGCTTTCCAGTTCAGACTCTAACTTCTCCCAAAGTGTCCTAAGAAAATACTGGATCGGC TCATAGATTTATGCTCCTTATGATGCCCTAACTTGGAAGGTTGTTCTAGGGACAGGCCGGGCAGTGTCCCCACAC

PCT/US2003/028547

FIGURE 1378C

ACACCTTAGAGTCGAAGGCCCCAGGGCCCCGCTGTCACTTGCCCAAAAGATCCCTTCCGGCAGGTAAGGGACTAC CAATGCTTACGTCAAAACAGCAGAATCGGCTTTGCAGTGCACTTTGGGGAGCAGATATTAACTTATTTTTGTGTT GGACAGTAGTGAAATCTTGTGATTTTTAATCGCTTTGATAATACTTCCAAATTTTATGATTTTTCTGAAGGAAAT AATGCAAACATTTTAAATATGTTTCTCCCCCTTTCCAAAAACTGTTAAACTAATGAGCAAGTAACACTAACTTTG AATGTCTCTACAATACCCGTTGATAACTCAGTGGAGCCAGGCTTTGGGGGTAGCGGCCCTGAGCTTGCAGGGTTTC TGAGGACGTGGTGACTTCCTGAACATCAGCTTCAATCCTCCATCATTAATGTGAAGCAAAACACAAAAACCGCCC GGGGATGTGTCCGAATGGGCAGCTTAAAATGTGGTCACCTGTGGGGGGAAACTCTTCAGGCACCTGAAGTGAGAAC TTGTCTGTCTTGACATCTAAACCCCGGCGTGTGCAGTGCCCATCTTCCAGGACTACCTTATTTTCCAGAATTAAA CCTGTTTTATAATTCAAGTTAATGCAAATGACTGTCAGTTGCCAAATATCTTGATCCTGTGAGTGTAGTTGATGA CTGTTTGTTAGTCAGTAGAGTAAAATGCTGTGTCCACGGGGTGTCACCACCACCACACCCTGTTGAGGTGTGA AATGCCCCGTCAGAAATTAAATACAAACTTAAATGTGCCTATTGGTGTCTAAACTTCATACAATGTAAGGTCAGA TTCCTTTTAGGAATACTGGGTGCTGTCACCAGGTTTGATAGTTAGACTTAAAAACTTGAAATTCACTTTTTGGGG GGAGGGATATACTGAAATAGAGAGTTGAGACTTGCCAGTTGGGGGGAAAATAGCATTTAAAATGGAAAGCTGTGTT TGGAAAATTGTGTATGAGTATTTTTGTATTAAAAACATTTTAAAGGCTTTTTTCTTAA

PCT/US2003/028547

FIGURE 1379

MEFSIKQSPLSVQSVVKCIKMKQAPEILGSANGKTPSCEVNRECSVFLSKAQLSSSLQEGVMQKFNGHDALPFIP
ADKLKDLTSRVFNGEPGAHDAKLRFESQEMKGIGTPPNTTPIKNGSPEIKLKITKTYMNGKPLFESSICGDSAAD
VSQSEENGQKPENKARRNRKRSIKYDSLLEQGLVEAALVSKISSPSDKKIPAKKESCPNTGRDKDHLLKYNVGDL
VWSKVSGYPWWPCMVSADPLLHSYTKLKGQKKSARQYHVQFFGDAPERAWIFEKSLVAFEGEGQFEKLCQESAKQ
APTKAEKIKLLKPISGKLRAQWEMGIVQAEEAASMSVEERKAKFTFLYVGDQLHLNPQVAKEAGIAAESLGEMAE
SSGVSEEAAENPKSVREECIPMKRRRRAKLCSSAETLESHPDIGKSTPQKTAEADPRRGVGSPPGRKKTTVSMPR
SRKGDAASQFLVFCQKHRDEVVAEHPDASGEEIEELLRSQWSLLSEKQRARYNTKFALVAPVQAEEDSGNVNGKK
RNHTKRIQDPTEDAEAEDTPRKRLRTDKHSLRKRDTITDKTARTSSYKAMEAASSLKSQAATKNLSDACKPLKKR
NRASTAASSALGFSKSSSPSASLTENEVSDSPGDEPSESPYESADETQTEVSVSSKKSERGVTAKKEYVCQLCEK
PGSLLLCEGPCCGAFHLACLGLSRRPEGRFTCSECASGVARHSLGSVRMMRGHLHSRGPSCLLTGPKESPISRQN
TSWVRKTPGESPRPWQPHSSTSLMGVSVCLPRMISDCSTTGQLLSRRKGLFS

PCT/US2003/028547

FIGURE 1380A

TGGTCTTGAACTCCTGACCTTGTGATCCGCTCGCCTCAGCCTCCCAAAGTGCTGGGATTACAGGCATGAGCCACC GTGCCTGTCCTAGAACCACTGGTAACTCTTAACTGAGACAAGATTTCGCCATGTTGCCCAGGCTGGTCTCGAACT TCTGAGCTCAAGCGATCTACCTGCCTCGTCCTCCCAAAGTGTTGGAATTGCAGGTGTGAGCCACTGCACCCGGCC CTTGCCTCATGTTTGAATGATAATTTACCTGGGCATAAAATTCTGGACACTTGTGGTGGCACGAGCTGTCTGCTT TTCTGTGGAGACTGCGGGTTGCAGACACCAGCAGCCCCCTATTGCTGCACGTCAGGTGTCCTCCACCTCAGTACT GTGGACATCTCGGGCCGCATAGCCCTGTTGCGCGGGCATCCTGTGCGTTGCAGGAGATGCAGCAGCATCCATGAC CTGTTCAGAGTGTTGTAAAGTGCATAAAGATGAAGCAGGCACCAGAAATCCTCGGCAGTGCCAACGGGAAGACTC CGAGCTGCGAGGTGAACCGCGAGTGTTCTGTGTTCCTCAGCAAAGCCCAGCTCTCCAGTAGCCTGCAGGAGGGGG TCATGCAGAAGTTTAACGGCCACGACGCCCTGCCCTTTATTCCAGCCGACAAGCTGAAAGATCTTACTTCCCGGG TGTTTAATGGAGAACCCGGCGCACACGATGCCAAACTGCGTTTTGAGTCCCAGGAAATGAAAGGGATTGGGACAC CAGAAAACAAGGCGAGAAGGAACAGGAAGAGGAGCATAAAATATGACTCCTTGCTGGAGCAGGGCCTTGTCGAAG GAAGAGACAAGACCACCTGTTGAAATACAACGTTGGTGATTTGGTGTGCCCAAAGTGTCGGGTTACCCTTGGT GGCCTTGCATGGTTTCTGCAGATCCACTCCTTCACAGCTATACCAAACTTAAAGGTCAGAAAAAAGAGTGCACGCC AGTATCACGTACAGTTCTTTGGTGACGCCCCAGAAAGAGCTTGGATATTTGAGAAGAGCCTCGTAGCTTTTGAAG GAGAAGGACAGTTTGAAAAATTATGCCAGGAAAGTGCCAAGCAGGCACCCACGAAAGCTGAGAAAATTAAGCTAT TGAAACCAATTTCAGGGAAATTGAGGGCCCAGTGGGAAATGGGCATTGTTCAAGCAGAAGAAGCTGCAAGCATGT CAGTGGAGGAGCGGAAAGCCAAGTTCACCTTTCTCTATGTGGGGGGACCAGCTTCATCTCAACCCTCAAGTAGCCA AGGAGGCTGGCATTGCTGCAGAGTCTTTGGGAGAAATGGCAGAATCCTCAGGAGTCAGTGAAGAAGCTGCTGAAA CCCTGGAGAGTCACCCCGACATAGGGAAGAGTACTCCTCAAAAGACGCCAGAGGCTGACCCCAGAAGAGGAGTAG TGGTCTTCTGTCAAAAACACAGGGATGAGGTGGTAGCTGAGCACCCAGATGCTTCAGGTGAGAGATTGAAGAGC TGCTCAGGTCACAGTGGAGTCTGCTGAGTGAGAAGCAGAGAGCACGCTACAACACCAAGTTTGCCCTGGTGGCCC CAGAAGATGCTGAAGCTGAGGACACACCCAGGAAAAGACTCAGGACGACAAGCACAGTCTTCGGAAGAGAGACA CAATCACTGACAAAACGGCCAGAACAAGCTCTTACAAGGCCATGGAGGCAGCCTCCTCGCTCAAGAGCCAGGCAG CAACGAAAAATCTGTCTGATGCATGTAAACCACTGAAGAAGCGAAATCGGGCTTCCACGGCAGCATCTTCAGCTC TTGGGTTTAGCAAAAGTTCATCTCCTTCTGCATCCTTAACTGAGAATGAGCTTTTGTGGGAGCCCACACCAGTCA ${\tt AGTTGGATTTGAACCCAGCTGCTCTGTACTGCACT} {\color{red}{\textbf{TAG}}} {\color{blue}{\textbf{AATGATGTAATATTCCAGGATGCTGCAGGTGGCG}}$ TATCATCGTACACACTCAGTGACATTTCTATCACAATCATTTTATGGAAGATGTGTGATAATCTGTTTTTACTGG TATTAATAAACACATACAATGAAGAAAACAGATAACAAATTTTAAGACCAAGGTCTCGGACAGCCCGGGAGACGA GCCCTCGGAGTCCCCATACGAAAGTGCAGACGAAACACAAACTGAAGTATCTGTCTCATCCAAAAAGTCTGAGCG AGGAGTGACTGCCAAAAAGGAGTATGTGTGCCAGCTGTGTGAGAAGCCGGGCAGCCTCCTGCTCTGTGAAGGACC CTGCTGCGGAGCTTTCCACCTCGCCTGCCTTGGGCTTTCCCGGAGGCCAGAAGGGAGGTTCACCTGCAGCGAGTG TGCCTCAGGGATTCACTCATGTTTCGTGTGTAAAGAGAGCAAGACAGATGTTAAGCGCTGTGTGGTAACTCAGTG TGGAAAATTTTACCATGAGGCTTGTGTGAAAAAATACCCTCTGACTGTATTTGAGAGCCGAGGTTTCCGCTGCCC CCTCCACAGCTGTGTGAGCTGCCATGCTTCCAACCCTTCAAACCCAAGGCCGTCAAAAGGTAAAATGATGCGGTG TGTCCGCTGCCCGTTGCCTATCACAGCGGGGATGCTTGTCTGGCAGCAGGATGCTCAGTGATCGCCTCCAACAG CATCATCTGCACTGCCCACTTCACTGCTCGGAAGGGGAAGCGACACCACGCCCACGTCAACGTGAGCTGGTGCTT CGTGTGCTCCAAAGGGGGGAGCCTTCTGTGCTGTGAGTCCTGCCCAGCGGCCTTCCACCCTGACTGCCTGAACAT CGAGATGCCTGACGGCAGCTGGTTCTGCAATGACTGCAGGGCTGGGAAGAAGCTGCACTTCCAGGATATCATTTG GGTGAAACTTGGGAACTACAGATGGTGGCCGGCAGAAGTTTGCCATCCCAAAAATGTTCCCCCAAAŢATTCAGAA AATGAAGCACGAGATTGGAGAATTCCCTGTGTTTTTCTTTGGGTCTAAAGATTATTACTGGACGCATCAGGCGCG AGTGTTCCCGTACATGGAGGGGGACCGGGGCAGCCGCTACCAGGGGGTCAGAGGGATCGGAAGAGTCTTCAAAAA

PCT/US2003/028547

1488/6881 FIGURE 1380B

CGCACTGCAAGAAGCTGAAGCTCGTTTTCGTGAAATTAAGCTTCAGAGGGAAGCCCGAGAAACACAGGAGAGCGA GCGCAAGCCCCACCATACAAGCACATCAAGGTGAATAAGCCTTACGGGAAAGTCCAGATCTACACAGCGGATAT TTCAGAAATCCCTAAGTGCAACTGCAAGCCCACAGATGAGAATCCTTGTGGCTTTGATTCGGAGTGTCTGAACAG GATGCTGATGTTTGAGTGCCACCCGCAGGTGTTCCCGCGGGCGAGTTCTGCCAGAACCAGTGCTTCACCAAGCG CCAGTACCCAGAGACCAAGATCATCAAGACAGATGGCAAAGGGTGGGGCCTGGTCGCCAAGAGGGGACATCAGAAA CGAGAACGACATCACCCACTTCTACATGCTCACTATAGACAAGGACCGTATAATAGACGCTGGCCCCAAAGGAAA CTACTCTCGATTTATGAATCACAGCTGCCAGCCCAACTGTGAGACCCTCAAGTGGACAGTGAATGGGGACACTCG TGTGGGCCTGTTTGCCGTCTGTGACATTCCTGCAGGGACGGAGCTGACTTTTAACTACAACCTCGATTGTCTGGG CAATGAAAAAACGGTCTGCCGGTGTGGAGCCTCCAATTGCAGTGGATTCCTCGGGGATAGACCAAAGACCTCGAC GACCCTTTCATCAGAGGAAAAGGGCAAAAAGACCAAGAAGAAAACGAGGCGCGCGCAGAGCAAAAGGGGAAGGAA GAGGCAGTCAGAGGACGAGTGCTTCCGCTGCGGTGATGGCGGGCAGCTGGTGCTGTGACCGCAAGTTCTGCAC CAAGGCCTACCACCTGTCCTGCCTGGGCCTTGGCAAGCGGCCCTTCGGGAAGTGGGAATGTCCTTGGCATCATTG TGACGTGTGTGGCAAACCTTCGACTTCATTTTGCCACCTCTGCCCCAATTCGTTCTGTAAGGAGCACCAGGACGG GACAGCCTTCAGCTGCACCCCGGACGGCCGGTCCTACTGCTGTGAGCATGACTTAGGGGCGGCATCGGTCAGAAG GCGGGAGAGGGCGAGCATGAACTGGCCCGGAGGACCCAGCTCGAGCCGCCAGGACACAGACGTACAGGCCTCCTC GGGAGGGAGCGCCTCCCCACCACTGAGCCATCCTCAGCAGCGTCCGCTGCGTCTGCACTGATGACCGTCTGAGCC CAGCTCAGCGTTCCTGGACAAACAGCCTCACTCCTCAGCGTTACCGCCACACTTGAATTTCTCCGAATGTCAAGG TTCCCTCCCACTCTATTTTTTTAGGTTAAAGTTAATTGGCATATGGAATGTTTTAATCTCCTCTGAAATGTGTAG CGTAGGCTTTTCCCAAGGGTCGCTAGAAACTCGTCTTCGCGTTGCCCCCTTTCTGGCTCTCAGCGCCGTCGCCAC TCGGGAGAGGCTGGGTGAGGCCCGTGTGAGGACTGACCCTGGATTCCTCGAAACTGCCATTGTGATCATTACTCT GCTCTTTGGAAATGGCTGTATCATTTTTTTGTACTAATGTGAATTGTTCCTCAGAAACGCTTCTTTTCCATCCTA GTGAGAAGCTGGCCCTGCAGGTGGTGGCAGCAATGGTGTTGTAAGATTTCCTCCCGTAGTTTTTTCTCCTCATGG ATTTGAATGAAATGCCAATAACACGTCCACTTTCAACGTGTAGTTTACGCGGAGCACTTTCGAGGCCTGGCCGGG TTGGGCCTACTTCTCACCTGGGCCTATCTTCTGAACTCGCTAGGTTCTTATCAACATTTGGGGGATAACTTTGTA TATTTTTTCATTTGGCTTTTCTTTACCAGTTTCTGATTTTTATTCTCAATATATTTTTGCTAAACCTATTTCAC AAATCACCACCGACTGAAGTGTGTTTTACTGATGCGGCCCTGAGCTCCATGGCGAAAGGAGTGACTTTGCAGGG CGTGAGACCGCAGTCTGCTTAGAGCACAGGAAGTGACAACTTAGGGAGCCCCGTAGGGCGCTGCAGGCCCCGGGG ACCCCAGCACGTGGGTCTAAAGAGAGACGGAGTCTAGCTCTCCTGCCACCCAGAGTGGCTTCCATCTCAGCACTC TGTGGGTCTGGTGATGGAAGATGCAGTCTCTGCTGATCACATGTGCCCTCTGCCAGGGCACCTACTGAGAGGTGC GGTCCTGGGGGTGGAGGCCTGCCTGGCAGGTGTGCGTGCCTCGTACGTGTTATGGGCACTGGTCTAGGCCAGG CTGAGTACTACATATGTTTTAAGACTTGGTTCTTTTTTTGAGGGATCCTTGACCCTGGGAAGTCTGGAGCACCCT ACAGAACTCCCCTTGAAAACTGCTGCTGAGGCTCCTGTTAAATTTTCTGTGGCATCTTTTATGCCTTGGTAAAAA CTGCAGTGTCTTTGGACCTGAGAGTGGCTACTCCGTGGTTTTGTGACCTGTAAGCGTGGGGTTCAGGGGTGTGTG GGGTCCCCAGCAAAGTTAACTACACAGAGGACCCAGGGGAAACGAGCTGTGTAGCCACTGACTTGCTCGCGGGGC CGTGGCCTCTGAGGGGCACTCGCCGGTTAAGACAGGGTGGGAGTAGTGCTTTCCAGTTCAGACTCTAACTTCTCC CANAGTGTCCTAAGAAAATACTGGATCGGCTCATAGATTTATGCTCCTTATGATGCCCTAACTTGGAAGGTTGTT CTAGGGACAGGCCGGGCAGTGTCCCCACACACCCTTAGAGTCGAAGGCCCCAGGGCCCCGCTGTCACTTGCCCA AAAGATCCCTTCCGGCAGGTAAGGGACTACCAATGCTTACGTCAAAACAGCAGAATCGGCTTTGCAGTGCACTTT GGGGAGCAGATATTAACTTATTTTTGTGTTGGACAGTAGTGAAATCTTGTGATTTTTAATCGCTTTGATAATACT TCCAAATTTTATGATTTTTCTGAAGGAAATAATGCAAACATTTTAAATATGTTTCTCCCCCTTTCCAAAAACTGT TAAACTAATGAGCAAGTAACACTAACTTTGAATGTCTCTACAATACCCGTTGATAACTCAGTGGAGCCAGGCTTT

PCT/US2003/028547

FIGURE 1380C

PCT/US2003/028547

1490/6881 FIGURE 1381

MEFSIKQSPLSVQSVVKCIKMKQAPEILGSANGKTPSCEVNRECSVFLSKAQLSSSLQEGVMQKFNGHDALPFIP ADKLKDLTSRVFNGEPGAHDAKLRFESQEMKGIGTPPNTTPIKNGSPEIKLKITKTYMNGKPLFESSICGDSAAD VSQSEENGQKPENKARRNRKRSIKYDSLLEQGLVEAALVSKISSPSDKKIPAKKESCPNTGRDKDHLLKYNVGDL VWSKVSGYPWWPCMVSADPLLHSYTKLKGQKKSARQYHVQFFGDAPERAWIFEKSLVAFEGEGQFEKLCQESAKQ APTKAEKIKLLKPISGKLRAQWEMGIVQAEEAASMSVEERKAKFTFLYVGDQLHLNPQVAKEAGIAAESLGEMAE SSGVSEEAAENPKSVREECIPMKRRRRAKLCSSAETLESHPDIGKSTPQKTAEADPRRGVGSPPGRKKTTVSMPR SRKGDAASQFLVFCQKHRDEVVAEHPDASGEEIEELLRSQWSLLSEKQRARYNTKFALVAPVQAEEDSGNVNGKK RNHTKRIQDPTEDAEAEDTPRKRLRTDKHSLRKRDTITDKTARTSSYKAMEAASSLKSQAATKNLSDACKPLKKR NRASTAASSALGFSKSSSPSASLTENELLWEPTPVKLDLNPAALYCT

PCT/US2003/028547

1491/6881 FIGURE 1382

GCGTCCCTGCTCACGGCCGCGGTCATCGACAACATCCGTCTCTGCTTCCATGGCCTCTCGTCGGCAGTGAAGCTC AAGTTGCTACTCGGGACGCTGCACCTCCCGCGCCGCACGGTGGACGAGATGAAGGGCGCCCTAATGGAGATCATC CAGCTCGCCAGCCTCGACTCGGACCCCTGGGTGCTCATGGTCGCCGACATCTTGAAGTCCTTTCCGGACACAGGC TCGCTTAACCTGGAGCTGGAGCAGAATCCCAACGTTCAGGATATTTTGGGAGAACTTAGAGAAAAGGTGGGT GAGTGTGAAGCGTCTGCCATGCTGCCACTGGAGTGCCAGTACTTGAACAAAAACGCCCTGACGACCCTCGCGGGA CAGAAGTCCACGGAGACCGCCCAGCAGTTGAAGCGGAGCGCCGGGGTGCCCTTCCACGCCAAGGGCCGGGGGCTG CTGCGGAAGATGGACACCACCACCCACTCAAAGGCATCCCGAAGCAGGCGCCCTTCAGAAGCCCCACGGCGCCC GCGGAGGTGGTGGAGAAGCCGGCCAAGGAGGAAACGGTGGTGGAGAACGCCACCCCGGACTACGCAGCCGGCCTG GTGTCCACGCAGAAACTTGGGTCCCTGAACAATGAGCCTGCGCTGCCCTCCACGAGCTACCTTCCCTCCACGCCC CCACCAGAGGAGCCCAGCCCCGAGCCCCACGTTGCCAGCGCAGTTCAAGCAGCGGGCGCCCCATGTACAACAGC GGCCTGAGCCCTGCCACCCCACGCCTGCGGCGCCCACCTCGCCTCTGACACCCCACCAÇACCTCCGGCTGTCGCC CCTACCACTCAGACACCCCGGTTGCCATGGTGGCCCCGCAGACCCAGGCCCTGCTCAGCAGCAGCCTAAGAAG AACCTGTCCCTCACGAGAGAGCAGATGTTCGCTGCCCAGGAGATGTTCAAGACGGCCAACAAAGTCACGCGGCCC GAGAAGGCCCTCATCCTGGGCTTCATGGCCGGCTCCCGAGAGAACCCCGTGCCAGGAGCAGGGGGACGTGATCCAG ATCAAGCTGAGCGAGCACACGGAGGACCTGCCCAAGGCGGACGGCCAGGGTAGCACAACCATGCTGGTGGACACA $\tt GTGTTTGAGATGAACTATGCCACGGGCCAGTGGACGCGCTTCAAGAAGTACAAGCCCATGACCAATGTGTCC{\color{red}{TAG}}$

PCT/US2003/028547

FIGURE 1383

MASMRESDTGLWLHNKLGATDELWAPPSIASLLTAAVIDNIRLCFHGLSSAVKLKLLLGTLHLPRRTVDEMKGAL MEIIQLASLDSDPWVLMVADILKSFPDTGSLNLELEEQNPNVQDILGELREKVGECEASAMLPLECQYLNKNALT TLAGPLTPPVKHFQLKRKPKSATLRAELLQKSTETAQQLKRSAGVPFHAKGRGLLRKMDTTTPLKGIPKQAPFRS PTAPSVFSPTGNRTPIPPSRTLLRKERGVKLLDISELDMVGAGREAKRRKTLDAEVVEKPAKEETVVENATPDY AAGLVSTQKLGSLNNEPALPSTSYLPSTPSVVPASSYIPSSETPPAPSSREASRPPEEPSAPSPTLPAQFKQRAP MYNSGLSPATPTPAAPTSPLTPTTPPAVAPTTQTPPVAMVAPQTQAPAQQQPKKNLSLTREQMFAAQEMFKTANK VTRPEKALILGFMAGSRENPCQEQGDVIQIKLSEHTEDLPKADGQGSTTMLVDTVFEMNYATGQWTRFKKYKPMT NVS

PCT/US2003/028547

1493/6881 FIGURE 1384A

TCCCAGCCTGAAACCAACACATTTTCTAATAAGTTATTTAGACAGAATAGCACTCTGCATGACTTTAATTCTTGG GCGTTTTGCTGTTGGAAACCTGGAGGGAAACCCTGATTGGATGTCATTTCCTGCCATGGAGCACGCCTCCCAGCC CTGGCCTGCAGGGTGGGCAGGGGGGGGGAAGGGAGTCCGCAGCCTCCGGGAGGAGGGGGCAGGGCGCTGCCTTG GCAGGGGCTGCCCTGGACGGGGGGGGGGGGGGGGGGCCTGGAAGGGGAGACAGAGGTGGAGGGTGGCACAGGCTG CACATTCAGCTTAGAAGTGGACCTGGCTTTGGTGGCAGGAGAAGAATAAACACTTGCCCAGACCCCTTTGTGTGG GGGAATTGGGGAGGGTCGTGGCAGGCAGGGTGGGCCACGGAACTGGGTCCCAGGCATCAAGGCCACGTGCAGGG CCATGGAGGGATGCTTCTCACGAGGCGCTTCAGAAGCGAGGGACAGAGAAGCCCTGCGTCCAAGGGCCTT TTGTCCTGTTAGCAATTGAGGTGTGCAGAGCACTGTACAGACCCCACTCCCCTGTACATTCCTCCCTGGAGGTGC CCGGTCCCCGCTTGGGGATGGGAGTTTTGTAGACTGTACAGAAATCGGCACCCTATTTTCTTGCAGCTCAGATTT TTTGGTTTGGTTTGGGTTTGGCCTGGGGCTGGTCCCAGTTGGTGCGGGGCATGCTGGGGGGCAGGAGGGGCAGGGC GGGCCAGGTGGAGTCAGGTCTTGGGGGTGTCATGTCGGGGTGCTGCCAGCGTCCCTTGGTCCTTTGGAG CCTCGGGCTCCTGGGGTGCAGGGTGCTTGGGGGTGGCTGTTGGAGCCCACCGACGCCAGGGCAGGGCCTGGAGGC CCAGGGACTGCCAGTGTCTCCTTGATATTGATCCTAGCAGATCCCCCTCCTGGGGGGTTCTGAGAGTCCTGGGCAG TGAGACGCTTGGCCTTTTTTGTTGCTGCCAGGACTTGGTAGAGATGGCAGGAAGGGTGTGCGGGGTGGTTGTGTG TGCCAGGCCAATGTGTAGCTTGGTGGCGCCCTTGAAGGCCACTGGGGGGTAGGTGTGTCCTCCCCCGGGGCTGGA GGCCGGGTGCCTGGTGGGTGGGCCTGACCTGGCCCACCTCATCCCTCCAGCCTGGGATCTCACTGCTCTGCACCT GTGCACTGACGTGAATTTTATACGTTTGTAGAAACTCTGATGTAACTTCTTCTACCTCTGAAGCGCCCTCCTGGG AAACTCTGCGTGGTGAGGCCCGGGGAAAGCCAGGCCGGGCCCTAGCACTGCTCAGGGGCCTGGGGCTCCTGGGAT AGAGCTGGGCGAAGGACGACCTCACTGGACGAGCACTGCAGGCCTGACGAGAGGCTCCGGGCAGCTGAGGGC TGAAGCGCCTCGGGATGCCCCACACTGCCCAGAGCCACGGGTCTTGCTGTGCTGGGGGTGGGGTGGCCCCAGGCA GCTGCCACTGCCCAGGTGTGAGTCGCTGCAGACCTGGTCCCTGAGGGTGGGAGGCCTGCTTGTGCTGAAGCTGCC ATGTGGTCTGGCCCCCAGAAGGGCTCCTGAGCGTAGGGAGTTGAGCCCCGCAGCCGTGGCGGCATCTCCTCCTCC TTCCTCCGCCCCATGCCCAGCCTTGCTTCCGGCTGGTGGCATGCCTTGGGGCCGGGCAGCAGGTGAGAAGCTGCC TGGGAGGCCCTGTGGACAGCAGGCCTGAGGCCACGAGGTCCTGGGGCCACCCCTCTCCTGCTCTGGGTGTCCTTC TCAGAGAAGATGGCAGAAGGCTGCAGGCCCTAGAGGGGACGACGGGCTGGGGACGCCCTGAGCTTCCTGGCTGTG TGGCAGGTGCTGGGGAAGCTCTCTGGGCCATAGGGACCTGGCTCCCCTCTGAGAGGCCCGCCTGCCCTGGGACAC CCAGGGCTGTGCTGGTGGCCTGAGGCTGGGAACTTGGGTTCCTGGGCTCTGCTGGCGCCTTGGGGCTTTGTGGGGGC CGAAGGTGGTTGCCCCGCCGGGCAGGGGGCTGTGTGGGCCCTTCGTGGGGCCACCTTCCTGTCAGTGCCCGAGGGA CGGTGGGACAGTTGCCCCTGCGCCAAGGGAGCCCACTGCCATCCCCCGTGGGCTGGCGCTGCAGTCGCGCACCCT GTGTTGCCTGACTTGCTTATGTCTGTTTGGAAGCTGCTTCTGTTTGGCCACAGGCCTGTGTTCCTGGGCTGA TGGCCACAGAGCTGACACTTGGGGTTTGAGTTCCAGACTTGCAGACCCTGGGATCCGCTTACTCCTCCGCGCCAC GGCTGCTGTGCTTCCAGAGGTGGCGTGATGCCTCCCGGGGCCACGGTGGGGTGAAGGATGGCGAGCCGGACATAC GTGCACGTGTTTGAGCGTGTGTGTGTGTGCAAGTGGGTTCTTGGATATGTGTAGTGTGAGCATGTGTGCATGT ATAGGTGTACATGTGCATGAGTTGTGTACATGCGTGAGCACGTGTATAGATGTACGTGTGTGCGCATGTGTGC GTGTACATGTGTTTGTGTCTTGGGTATGCATAAGCATGCACGTGTGTATGAATGTGCGTGTGTATGCATGAGCAC

PCT/US2003/028547

FIGURE 1384B

PCT/US2003/028547

1495/6881 FIGURE 1385

 ${\tt MSMHACECLCVYLHICGCAGTRRWWAGSARGSRSCSRLPCWAPGPGLSLPGPSCPSVEQGLGGGPGQLQGRSGEARGEHRGWGSPAAVCSRNCTVSPRRGQIVLRPQMCQNSPQGGGERVLRRGAAGAGGGGCVPLP}$

PCT/US2003/028547

FIGURE 1386

GAGGAGCTCTCCTGGGCGGCTGAAGAAGGAGCTTCTTCTCCGGAGTGCGAAGGCGGTGGCGCCTGCGGACCTAAC TAGCTCCAGGTTAGGCCGAGCTTTGCGGGAAAGCAGCGGACTTGAAAATACTGGAAATCTGTCCGGATCCAAATT ATTTTGCAAGCCAGATGAGTAACCAGAGGGCATGAAAGGTTGAGAACATTTGACTTCCCTGCAAACCTTGGTATA GATCACTTCCTTTTCTGTAGGAAAGGAAAGGCACCAAAGAGCACAATGAGTACAAGAAAGCGTCGTGGTGGAGCA ATAAATTCTAGACAAGCTCAGAAGCGAACTCGGGAAGCAACCTCCACCCCGAGATCTCCTTGGAAGCAGAACCC ATAGAACTCGTGGAAACTGCTGGAGATGAAATTGTGGACCTCACTTGTGAATCTTTAGAGCCTGTGGTGGTTGAT CTGACTCACAATGACTCTGTTGTGATTGTTGACGAAAGAAGAAGACCAAGGAGGAATGCTAGGAGGCTGCCCCAG GACCATGCTGACAGCTGTGTGGTGAGCAGTGACGATGAGGAGTTGTCCAGGGACAGAGACGTATATGTGACTACC CATACTCCCAGAAACGCCAGGGATGAGGGCGCTACAGGCCCTCAGGTACTGTCAGTTGTCCCATCTGC ATGGACGGATACTCAGAGATCGTGCAGAATGGACGTCTCATCGTTTCCACAGAATGCGGCCATGTCTTCTGTAGC CAGTGCCTCCGTGATTCCCTGAAGAATGCTAATACTTGCCCAACTTGTAGGAAAAAGATCAACCACAAACGGTAC TGGTATCTGCCTCCATTTTCCTGAGATCAAAAAGACTGTTTCGAAACCAACATCTGATATGTAAACTGCTCTTTT GTTTCCAACCCCTTCCTTTTGTTATCTCCAGTTTGATGCTATGGCGCTGGACCCAGGGCCCTCCCAGGCCATCTC TGTTCCTCTGGGGTGGTCCAGTTCTAGAGTGGGAGAAAGGGAGTCAGGCGCATTGGGAATCGTGGTTCCAGTCTG GTTGCAGAATCTGCACATTTGCCAAGAAATTTTCCCTGTTTGGAAAGTTTGCCCCAGCTTTCCCGGGCACACCAC TCGAGGATCCCAGGTTGAAGAGTGGCCCCTTGAGGCCCTGGAAAGACCAATCACTGGACTTCTTCCCTTGAGAGT CAGAGGTCACCCGTGATTCTGCCTGCACCTTATCATTGATCTGCAGTGATTTCTGCAAATCAAGAGAAACTCTGC AGGGCACTCCCCTGTTTCCTAAGAACGAAAAAGTGCAATAAAGGCCATTCGTTACCTACTTTTCAGCAGCCCACA AGATGTAGCACTATTAGTGTCCCCCTCAGAGGCTTAATGTTGCCTGTGGAGCAGTGCCCATCCCAGCCCGTTTCT GCCCACCAGTTGTTCTCAGGAACCTTACCCATGCTCCAGCGTCCTTCACCTGGCACAGGACATGCAAGATAAATA CAGTTCCCACTGCCTAACGTCTGCCCCCGTGTAGATACTGAGAGGTGGTGGCAGTAATTGTGGCCTTATCAGCCG $\verb|CTCAGTTCCAGGCTTTTGCCCAGGTCACTGTTGCCCCATGTTCGGAGAACCTGGCCCACCTGTCTTGGCTTTCTC| \\$ ATCCTTCCCAACCCAGTGCCGTTTATTTCAGAAGCTTCCTGGCCACTGGGCTTGGATGCTTCGGGCTTCTGACTG $\verb|CTCCATAGGTTTTGACTGGTGAAACAGGGGCCCAGATGACAACCTCTCCTTCGCTCCACAGGTACGCGGGAGCCT|\\$ CAGGTTCTCTCAGGGGCAGCAAAGTGGCCCAAGCTGCCCCTGACAGCACAGGGCCTGGGGGTGGCTAACGAGAGA TTTCGTGTGAAACATCTTCAGGGCGGGAAAGGGGCCACTTCTGGCTTTGTTAGCAATAACTGACCTTCAGTTTAC CCTTCTGAAGGAGCAGGGACTCAGCACAGAATTCACTTTAGACGGGGCTGAAGGAGTGTCCCTCTATGTGAA AATTTTCTACTTGGAGTTGAAGAGGGCAGAATCCGCAGCTCTCATCATTGTGATGTGTAGCATGTCTGCCCTCTG ACTGGACATCATTGCCATTAACTTTCTTCTGGGCATCACGGCAGTGTCACGATGCCCAGACTTGGAGCAAGGCAA CCTTGGAGTCAGTCCACTCATAAAATATGGTAACACCCATTTTAAAATTTAAGTTTTGTCCTTAAAGACAACTTC AGTGGTTAATTATAAAAGTTGTGTTACTTCGTCCTAAATTAAATTGATAGAAAGATTTAAAAATGTGTTTTGTTT CTACTATTCAGAAACTGCGAACTAGGGAAAGGTTGGTATGAAAAAATGTCTTTCCTTTTTTCAATGTACATAGTT CAACTCTTTCTTTGTTACATTTAAACTATATCCATGGATATCAGTCTGCTTTGGACTCCTCTGCTAGTGTTACAG

PCT/US2003/028547

1497/6881 FIGURE 1387

MSTRKRRGGAINSRQAQKRTREATSTPEISLEAEPIELVETAGDEIVDLTCESLEPVVVDLTHNDSVVIVDERRR PRRNARRLPQDHADSCVVSSDDEELSRDRDVYVTTHTPRNARDEGATGLRPSGTVSCPICMDGYSEIVQNGRLIV STECGHVFCSQCLRDSLKNANTCPTCRKKINHKRYHPIYI

PCT/US2003/028547

1498/6881 FIGURE 1388A

CGGCGCGCCCGGCCGAGGTGGGATCCCGAGGCCTCTCCAGTCCGCCGAGGGCGCACCACCGGCCCGTCTCGC ${\tt CCGCCGCGCGGGGAGGTGGAGCACGAGCGCACGTGTTAGGAACCTAGAAAGATTGTACA{\tt ATG}{\tt ATG}{\tt ATGGTGATTCT}$ CGTGCTGCGGTGGTGACCTCACCACCCCCGACCACAGCCCCTCACAAGGAGAGGTACTTCGACCGAGTAGATGAG AACAACCCAGAGTACTTGAGGGAGGAGCATGGCACCAGACCTTCGCCAGGACTTCAACATGATGGAGCAAAAG AAGAGGGTGTCCATGATTCTGCAAAGCCCTGCTTTCTGTGAAGAATTGGAATCAATGATACAGGAGCAATTTAAG AAGGGGAAGAACCCCACAGGCCTATTGGCATTACAGCAGATTGCAGATTTTATGACCACGAATGTACCAAATGTC TACCCAGCAGCTCCGCAAGGAGGGATGGCTGCCTTAAACATGAGTCTTGGTATGGTGACTCCTGTGAACGATCTT AGAGGATCTGATTCTATTGCGTATGACAAAGGAGAGAGTTATTACGGTGTAAATTGGCAGCGTTTTATAGACTA GCAGATCTCTTTGGGTGGTCTCAGCTTATCTACAATCATATCACAACCAGAGTGAACTCCGAGCAGGAACACTTC CTCATTGTCCCTTTTGGGCTTCTTTACAGTGAAGTGACTGCATCCAGTTTGGTTAAGATCAATCTACAAGGAGAT ATAGTAGATCGTGGAAGCACTAATCTGGGAGTGAATCAGGCCGGCTTCACCTTACACTCTGCAATTTATGCTGCA CGCCCGGACGTGAAGTGCGTCGTGCACATTCACACCCCAGCAGGGGCTGCGGTCTCTGCAATGAAATGTGGCCTC TTGCCAATCTCCCCGGAGGCGCTTTCCCTTGGAGAAGTGGCTTATCATGACTACCATGGCATTCTGGTTGATGAA \cdot GAGGAAAAAGTTTTGATTCAGAAAAATCTGGGGCCTAAAAGCAAGGTTCTTATTCTCCGGAACCATGGGCTCGTG TCAGTTGGAGAGAGCGTTGAGGAGGCCTTCTATTACATCCATAACCTTGTGGTTGCCTGTGAGATCCAGGTTCGA ACTCTGGCCAGTGCAGGAGGACCAGACAACTTAGTCCTGCTGAATCCTGAGAAGTACAAAGCCAAGTCCCGTTCC CCAGGGTCTCCGGTAGGGGAAGGCACTGGATCGCCTCCCAAGTGGCAGATTGGTGAGCAGGAATTTGAAGCCCTC AAATACAGCGATGTGGAGGTTCCTGCTAGTGTCACAGGTTACTCCTTTGCTAGTGACGGTGATTCGGGCACTTGC TCCCCACTCAGACACAGTTTTCAGAAGCAGCAGCGGGAGAAGACAAGATGGCTGAACTCTGGCCGGGGCGACGAA GCTTCCGAGGAAGGGCAGAATGGAAGCAGTCCCAAGTCGAAGACTAAGTGGACTAAAGAGGATGGACATAGAACT TCCACCTCTGCTGTCCCTAACCTGTTTGTTCCATTGAACACTAACCCAAAAGAGGTCCAGGAGATGAGGAACAAG ATCCGAGAGCAGAATTTACAGGACATTAAGACGGCTGGCCCTCAGTCCCAGGTTTTGTGTGGTGTAGTGATGGAC AGGAGCCTCGTCCAGGGAGAGCTGGTGACGGCCTCCAAGGCCATCATTGAAAAGGAGTACCAGCCCCACGTCATT GTGAGCACCACGGGCCCCAACCCCTTCACCACACTCACAGACCGTGAGCTGGAGGAGTACCGCAGGGAGGTGGAG \mathtt{CCC} TAACCTTGTGCCGGAGCCGACTACTGGAGATGACAGTGATGCTGCCACCTTTAAGCCAACTCTCCCCGATCT GTCCCCTGATGAACCTTCAGAAGCACTCGGCTTCCCAATGTTAGAGAAGGAGGAGGAAGCCCATAGACCCCCAAG CCCCACTGAGGCCCCTACTGAGGCCAGCCCCGAGCCCAGACCCAGCCCCGGTGGCTGAAGAGGCTGCCCC CTCAGCTGTCGAGGAGGGGGCCGCGCGGACCCTGGCAGCGATGGGTCTCCAGGCAAGTCCCCGTCCAAAAAGAA GAAGAAGTTCCGTACCCCGTCCTTTCTGAAGAAGAGCAAGAAGAAGAGTGACTCCTGAAAGCCCTGCGCTAACAC TGTCCTGTCCGGAGCGACCCTGGCTCTGCCAGCGTCCCCGGCCACGTCTGTGCTCTTGTCTTAATGGAATG CAAAAAAGCCAAGCCCTCCGCCTAGAGGTCCCCTCACGTGACCAGCCCCGTGTAGCCCCGGGCTGACCCAGTGTG TGCTCAGCAGCCCCACCCCACCCTGCCCCTTGTCCTCTCAGAGCCTCAGCTTCTGGGGGAGACATGCTCTCCCCA CAGGGGGGAGGCACTAAGTCATGGTCCTGGCTGGAAGGTACTGAAGGCTTCTGCAGCTTTGGCTGCACGTCACCC TCCTGAGCCTCACCTTTCCTGCCGTCCCTCTGTTGTGAAATCACCACATTCTGTCTCTGCTTGGCTTCCCCTCC ACCCTAAAGTCTCAGGTGACGGACTCAGACTCCTGGCTTCATGTGGCATTCTCTCTGCTCAGTGATCTCACTTAA ATCTATATACAAAGCCTTGGTCCCGTGAAAACACTCGTGTGCCCACCAGCGGCCTTGAAGAGGCAGGTCTGGGCC AGATGCTGGGCAGGAAACCCCAGCGGCAGATGGGCCTGTGTGCACCCAACGTGATGCTATGCATGTCTGACCGAC GATCCCTCGACCAGAATCAGATTCAGGAGCTCAGTTTCTTTTTCACTTGGGTCTCTGGATTCCTGTCATAGGGAA GGTATATCAGGAGGGGAAGAGGCCTTTCTAGAATTTTCTTTGAGCAGGTTTACAATTTAGCTTACATTTTTCGAC TGTGAACGTGAATAGGCTGCTTTTTGCTTTCTTCCTTCCAGACCCCACAGTAGAGCACTTTTCACTTATTTGGGG GAGGCTTCAGGGGACTGTTCTCACCTTAACTCAGCCAGAAAGATGCCCTAGTTGTGATCAAAGGTAACTCGAGGT GGAGGGTAGCCCTGGGGCCCCTCGACATCACCGTCATTGATGGAGCCTGAACCGTGTGCTCCTCGGCAGATGCTG TTGTTGTTACTTCCCTCCAAGAGGCTGGAAAAGGGCTCAGAGCTGCTGAGCAGGAACCGGAGGGTGACCCATTTC AGGAGGTGCCGGTACCAGCCTGACTAGGTACAGGCAAGCTTGTGTGGGCCCCAACAGGCCCTTGGTAGAGCTGGTG

PCT/US2003/028547

1499/6881 FIGURE 1388B

PCT/US2003/028547

1500/6881 FIGURE 1389

MNGDSRAAVVTSPPPTTAPHKERYFDRVDENNPEYLRERNMAPDLRQDFNMMEQKKRVSMILQSPAFCEELESMI QEQFKKGKNPTGLLALQQIADFMTTNVPNVYPAAPQGGMAALNMSLGMVTPVNDLRGSDSIAYDKGEKLLRCKLA AFYRLADLFGWSQLIYNHITTRVNSEQEHFLIVPFGLLYSEVTASSLVKINLQGDIVDRGSTNLGVNQAGFTLHS AIYAARPDVKCVVHIHTPAGAAVSAMKCGLLPISPEALSLGEVAYHDYHGILVDEEEKVLIQKNLGPKSKVLILR NHGLVSVGESVEEAFYYIHNLVVACEIQVRTLASAGGPDNLVLLNPEKYKAKSRSPGSPVGEGTGSPPKWQIGEQ EFEALMRMLDNLGYRTGYPYRYPALREKSKKYSDVEVPASVTGYSFASDGDSGTCSPLRHSFQKQQREKTRWLNS GRGDEASEEGQNGSSPKSKTKWTKEDGHRTSTSAVPNLFVPLNTNPKEVQEMRNKIREQNLQDIKTAGPQSQVLC GVVMDRSLVQGELVTASKAIIEKEYQPHVIVSTTGPNPFTTLTDRELEEYRREVERKQKGCEENLDEAREQKEKS PPDQPAVPHPPPSTPIKLEEGDGCAREYLLP

PCT/US2003/028547

FIGURE 1390A

CGGCGCGCTCGCCGGCCGAGGTGGGATCCCGAGGCCTCTCCAGTCCGCCGAGGGCGCACCACCGGCCCGTCTCGC CCGCCGCGCGGGGAGGTGGAGCACGAGCGCACGTGTTAGGAACCTAGAAAGATTGTACA<u>ATG</u>AATGGTGATTCT CGTGCTGCGGTGGTGACCTCACCACCCCCGACCACAGCCCCTCACAAGGAGAGGTACTTCGACCGAGTAGATGAG AACAACCCAGAGTACTTGAGGGAGGAGCATGGCACCAGACCTTCGCCAGGACTTCAACATGATGGAGCAAAAG AAGAGGGTGTCCATGATTCTGCAAAGCCCTGCTTTCTGTGAAGAATTGGAATCAATGATACAGGAGCAATTTAAG AAGGGGAAGAACCCCACAGGCCTATTGGCATTACAGCAGATTGCAGATTTTATGACCACGAATGTACCAAATGTC TACCCAGCAGCTCCGCAAGGAGGGATGGCTGCCTTAAACATGAGTCTTGGTATGGTGACTCCTGTGAACGATCTT AGAGGATCTGATTCTATTGCGTATGACAAAGGAGAGAGTTATTACGGTGTAAATTGGCAGCGTTTTATAGACTA GCAGATCTCTTTGGGTGGTCTCAGCTTATCTACAATCATATCACAACCAGAGTGAACTCCGAGCAGGAACACTTC CTCATTGTCCCTTTTGGGCTTCTTTACAGTGAAGTGACTGCATCCAGTTTGGTTAAGATCAATCTACAAGGAGAT ATAGTAGATCGTGGAAGCACTAATCTGGGAGTGAATCAGGCCGGCTTCACCTTACACTCTGCAATTTATGCTGCA CGCCCGGACGTGAAGTGCGTCGTGCACATTCACACCCCAGCAGGGGCTGCGGTCTCTGCAATGAAATGTGGCCTC TTGCCAATCTCCCCGGAGGCGCTTTCCCTTGGAGAAGTGGCTTATCATGACTACCATGGCATTCTGGTTGATGAA GAGGAAAAAGTTTTGATTCAGAAAAATCTGGGGCCTAAAAGCAAGGTTCTTATTCTCCGGAACCATGGGCTCGTG TCAGTTGGAGAGCGTTGAGGAGGCCTTCTATTACATCCATAACCTTGTGGTTGCCTGTGAGATCCAGGTTCGA ACTCTGGCCAGTGCAGGAGGACCAGACAACTTAGTCCTGCTGAATCCTGAGAAGTACAAAGCCAAGTCCCGTTCC CCAGGGTCTCCGGTAGGGGAAGGCACTGGATCGCCTCCCAAGTGGCAGATTGGTGAGCAGGAATTTGAAGCCCTC AAATACAGCGATGTGGAGGTTCCTGCTAGTGTCACAGGTTACTCCTTTGCTAGTGACGGTGATTCGGGCACTTGC TCCCCACTCAGACACAGTTTTCAGAAGCAGCAGCGGGAGAAGACAAGATGGCTGAACTCTGGCCGGGGCGACGAA GCTTCCGAGGAAGGCAGAATGGAAGCAGTCCCAAGTCGAAGACTAAGGTGTGGACGAACATTACACACGATCAC GTGAAACCCTTGCTGCAGTCTCTCTCGTCCGGTGTCTGCGTGCCAAGCTGTATTACCAACTGCTTGTGGACTAAA CAGGAGATGAGGAACAAGATCCGAGAGCAGAATTTACAGGACATTAAGACGGCTGGCCCTCAGTCCCAGGTTTTG TGTGGTGTAGTGATGGACAGGAGCCTCGTCCAGGGAGAGCTGGTGACGGCCTCCAAGGCCATCATTGAAAAGGAG AGTCCTCCAGACCAGCCTGCGGTCCCCACCCGCCTCCCAGCACTCCCATCAAGCTGGAGGAAGACCTTGTGCCG GAGCCGACTACTGGAGATGACAGTGATGCTGCCACCTTTAAGCCAACTCTCCCCGATCTGTCCCCTGATGAACCT TCAGAAGCACICGGCTTCCCAATGTTAGAGAAGGAGGAGGAAGCCCATAGACCCCCAAGCCCCACTGAGGCCCCT ACTGAGGCCAGCCCGAGCCCAGACCCAGCCCCGGTGGCTGAAGAGGCTGCCCCCTCAGCTGTCGAGGAG GGGGCCGCCGCGGACCCTGGCAGCGATGGGTCTCCAGGCAAGTCCCCGTCCAAAAAGAAGAAGAAGTTCCGTACC ${\tt CCGTCCTTTCTGAAGAAGAGAGAAGAAGAGAGTGACTCC}{{\tt TGA}}{\tt AAGCCCTGCGCTAACACTGTCCTGTCCGGAGCG}$ ACCCTGGCTCTGCCAGCGTCCCGGCCACGTCTGTGCTCTTGTGTAATGGAATGCAAAAAAGCCAAGCCC TCCGCCTAGAGGTCCCCTCACGTGACCAGCCCCGTGTAGCCCCGGGCTGACCCAGTGTGTGCTCAGCAGCCCCAC CCCACCCTGCCCCTTGTCCTCTCAGAGCCTCAGCTTCTGGGGGAGACATGCTCTCCCCACAGGGGGGAGGCACTA AGTCATGGTCCTGGCTGGAAGGTACTGAAGGCTTCTGCAGCTTTGGCTGCACGTCACCCTCCTGAGCCTCACCTT TCCTGCCGTCCCTCTGTTGTGAAATCACCACATTCTGTCTCTGCTTGGCTTCCCCTCCACCCTAAAGTCTCAGG TGACGGACTCAGACTCCTGGCTTCATGTGGCATTCTCTCTGCTCAGTGATCTCACTTAAATCTATATACAAAGCC TTGGTCCCGTGAAAACACTCGTGTGCCCACCAGCGGCCTTGAAGAGGCAGGTCTGGGCCAGATGCTGGGCAGGAA ACCCCAGCGGCAGATGGGCCTGTGTGCACCCAACGTGATGCTATGCATGTCTGACCGACGATCCCTCGACCAGAA TCAGATTCAGGAGCTCAGTTTCTTTTTCACTTGGGTCTCTGGATTCCTGTCATAGGGAAGGTATATCAGGAGGGG AAGAGGCCTTTCTAGAATTTTCTTTGAGCAGGTTTACAATTTAGCTTACATTTTTCGACTGTGAACGTGAATAGG CTGCTTTTTGCTTTCTTTCCAGACCCCACAGTAGAGCACTTTTCACTTATTTGGGGGAGGCTTCAGGGGACT GTTCTCACCTTAACTCAGCCAGAAAGATGCCCTAGTTGTGATCAAAGGTAACTCGAGGTGGAGGGTAGCCCTGGG GCCCCTCGACATCACCGTCATTGATGGAGCCTGAACCGTGTGCTCCTCGGCAGATGCTGTTGTTACTTCCCT CCAAGAGGCTGGAAAAGGGCTCAGAGCTGCTGAGCAGGAACCGGAGGGTGACCCATTTCAGGAGGTGCCGGTACC AGCCTGACTAGGTACAGGCAAGCTTGTGTGGGGCCCAACAGGCCCTTGGTAGAGCTGGTGCCAGATGTGGGCTCAG

PCT/US2003/028547

1502/6881 FIGURE 1390B

PCT/US2003/028547

FIGURE 1391

MNGDSRAAVVTSPPPTTAPHKERYFDRVDENNPEYLRERNMAPDLRQDFNMMEQKKRVSMILQSPAFCEELESMI QEQFKKGKNPTGLLALQQIADFMTTNVPNVYPAAPQGGMAALNMSLGMVTPVNDLRGSDSIAYDKGEKLLRCKLA AFYRLADLFGWSQLIYNHITTRVNSEQEHFLIVPFGLLYSEVTASSLVKINLQGDIVDRGSTNLGVNQAGFTLHS AIYAARPDVKCVVHIHTPAGAAVSAMKCGLLPISPEALSLGEVAYHDYHGILVDEEEKVLIQKNLGPKSKVLILR NHGLVSVGESVEEAFYYIHNLVVACEIQVRTLASAGGPDNLVLLNPEKYKAKSRSPGSPVGEGTGSPPKWQIGEQ EFEALMRMLDNLGYRTGYPYRYPALREKSKKYSDVEVPASVTGYSFASDGDSGTCSPLRHSFQKQQREKTRWLNS GRGDEASEEGQNGSSPKSKTKVWTNITHDHVKPLLQSLSSGVCVPSCITNCLWTKEDGHRTSTSAVPNLFVPLNT NPKEVQEMRNKIREQNLQDIKTAGPQSQVLCGVVMDRSLVQGELVTASKAIIEKEYQPHVIVSTTGPNPFTTLTD RELEEYRREVERKQKGCEENLDEAREQKEKSPPDQPAVPHPPPSTPIKLEEDLVPEPTTGDDSDAATFKPTLPDL SPDEPSEALGFPMLEKEEEAHRPPSPTEAPTEASPEPAPDPAPVAEEAAPSAVEEGAAADPGSDGSPGKSPSKKK KKFRTPSFLKKSKKKSDS

PCT/US2003/028547

FIGURE 1392

GGCCAACTCCAATCCGTTCGAGGTGAAAGTTAACAGGCAGAAGTTCCAGATCCTGGGCCGGAAGACGCGCCACGA ${\tt CGTGGGACTGCCCGGGGTGTCTCGCGCACGGGCCCTCAGGAAGCGTACACAGACTTTACTAAAAGAGTACAAAGA}$ AAGGGATAAATCCAATGTATTCAGAGATAAACGCTTCGGAGAATACAACAGCAACATGAGCCCCGAGGAGAAGAT GATGAAGAGGTTTGCTCTGGAACAGCAGCGACATCATGAGAAAAAAAGCATCTACAATCTAAATGAAGATGAAGA ATTGACTCATTATGGCCAGTCTTTGGCAGACATCGAGAAGCATAATGACATTGTGGACAGTGACAGCGATGCTGA GGATCGAGGAACGTTGTCTGCTGAGCTGACTGCCCCACTTTGGAGGAGGCGGTGGGCTCCTTCACAAGAAGAC TCAACAGGAAGGCGAGGAGCGGGAGAAACCGAAGTCCCGGAAAGAGCTGATTGAAGAGCTCATTGCCAAGTCAAA ACAAGAGAAGAGGGGAGACAAGCTCAACGAGAAGATGCCCTCGAGCTCACGGAGAAGCTAGACCAAGACTGGAA AGAAATTCAGACTCTCCTGTCCCACAAAACTCCCAAGTCAGAGAAACAGAGACAAAAAAGGAAAAACCCAAGCCCGA TGCATATGACATGATGGTTCGCGAGCTTGGCTTTGAAATGAAGGCGCAGCCCTCTAACAGGATGAAGACGGAGGC AGAATTGGCAAAGGAAGACAGGAGCACCTCAGGAAGCTGGAGGCTGAGAGACTTCGAAGAATGCTTGGAAAGGA TGAGGATGAAAATGTTAAGAAACCAAAACATATGTCAGCAGATGATCTGAATGATGGCTTCGTGCTAGATAAAGA TGACAGGCGTTTGCTTTCCTACAAAGATGGAAAGATGAATGTCGAGGAAGATGTCCAGGAAGAAGCAAAGCAAGGA AGCCAGTGACCCTGAGAGCAACGAGGAAGAAGGTGACAGTTCAGGCGGGGAGGACACAGAGGAGAGCGACAGCCC AGATAGCCACTTGGACCTGGAATCCAACGTGGAGAGTGAGGAAAACGAGAAGCCAGCAAAAGAGCAGAGGCA GACTCCTGGGAAAGGGTTGATAAGCGGCAAGGAAAGAGCTGGAAAAGCTACCAGAGACGAGCTGCCCTACACGTT CGCAGCCCCTGAATCCTATGAGGAACTGAGATCTCTGTTGTTAGGAAGATCGATGGAAGAGCAGCTTTTGGTGGT GGAGAGAATTCAGAAGTGCAACCACCCGAGTCTCGCAGAAGGAAACAAAGCAAAATTAGAAAAACTGTTTGGCTT CTTATATCATCTTTGCCAGATGTTTCCTGAATCTGCAAGTGACGCTATCAAATTTGTTCTCCGAGATGCGATGCA GCTCACCAAGTGCCCCATCCTGTCCCTCCAGGACGTGGTGAAGGGCCTGTTCGTGTGCTGCCTGTTCCTGGAGTA TGTGGCTTTGTCCCAGAGGTTTATACCTGAGCTTATTAATTTTCTTCTTGGGATTCTTTACATAGCAACTCCAAA CAAAGCAAGCCAAGGTTCCACTCTGGTGCACCCTTTCAGAGCGCTTGGGAAGAACTCGGAACTGCTCGTGGTGTC TTCGACAGAGGCCAATCACATCCGACTGTCCTGCCTGGCTGTGGGCCTGGCCTGAAGCGCTGCGTGCTCAT GTACGGGTCCCTGCCATCCTTCCACGCCATCATGGGGCCTCTCCAAGCCCTCCTCACGGATCACCTGGCGGACTG CAGCCACCGCAGGAGCTCCAGGAGCTGTCAGAGCACCTGACCGAAATGGAAAGCCAGAAGCAGCTCTGCCG GCCGCTGACCTGTGAGAAGAGCAAGCCTGTCCCACTGAAGCTTTTCACACCCCGGCTGGTCAAAGTCCTCGAGTT TGGAAGAAAACAAGGCAGTAGTAAGGAGGAACAGGAAAGGAAGAGGCTGATCCACAAACACAAGCGTGAATTTAA AGGGGCCGTTCGAGAAATCCGCAAGGACAATCAGTTCCTGGCGAGGATGCAACTCTCAGAAATCATGGAACGGGA TGCGGAAAGAAGCGGAAAGTAAAGCAGCTTTTTAACAGCCTGGCTACACAGGAAGGCGAATGGAAGGCTCTGAA GAGGAAAAAGTTCAAAAAA<u>TAA</u>ATTACATTTTATAAATAAGGCAAGGAACTGGACATTACCTCACATCTGCAATT CCAACCCTCTGGGAGGCCAAGGCAGGAAGATTGCTTCAGCCCAGGAGTTCGAGACCAGCCTGGGCAACACAGGAA AGGCTGAAGCAGGAGGACTGCTTGAGCTGAGTCCAAGGTTACAGTGAGCCGTGATTGAGCCACTGCACTCCAGCC GGCTGGAGTGCAATGGCACAACCTCCACCTCCTGGGTTCAAGCGATTCTCCTGCCTCAGCCTCCCGAGTAGCTGG · GATTACAGACATGTGCCACCACGCCCAGCTAATTTTGTATTTTTAGTAGAGACGGGGTTTCTCCATGTTGGTCAG GCTGGTCTCGAATTCCCGACCTCAGGTAATCCACCTGCCTTGGCCCCCAATTATAGGTGTGAGCCACAGCACCC AGCCAAAAAAGTAATTTTTTTTAGAGTAATAATGCTATAATGTTGGTGTGATTCCAACCTCCAGCTCCCCCACC CGGGAATGGTCTGTGTTATCAGCTGCGACTGGTTCACTGCGTCTGGACAAGCCTCATGGGGACTGGGGATTCT GGCCAGTGTAATTTCTGTCAACCACGGACGTTTGCCTTCATGTGTAGAATTTACTGTTGTTATGCAAATTATATT TTCAATTATAAATG

PCT/US2003/028547

1505/6881 FIGURE 1393

MAKAKKUGARRKASGAPAGARGGPAKANSNPFEVKVNRQKFQILGRKTRHDVGLPGVSRARALRKRTQTLLKEYK ERDKSNVFRDKRFGEYNSNMSPEEKMMKRFALEQQRHHEKKSIYNLNEDEELTHYGQSLADIEKHNDIVDSDSDA EDRGTLSAELTAAHFGGGGGLLHKKTQQEGEEREKPKSRKELIEELIAKSKQEKRERQAQREDALELTEKLDQDW KEIQTLLSHKTPKSENRDKKEKPKPDAYDMMVRELGFEMKAQPSNRMKTEAELAKEEQEHLRKLEAERLRRMLGK DEDENVKKPKHMSADDLNDGFVLDKDDRRLLSYKDGKMNVEEDVQEEQSKEASDPESNEEEGDSSGGEDTEESDS PDSHLDLESNVESEEENEKPAKEQRQTPGKGLISGKERAGKATRDELPYTFAAPESYEELRSLLLGRSMEEQLLV VERIQKCNHPSLAEGNKAKLEKLFGFLLEYVGDLATDDPPDLTVIDKLVVHLYHLCQMFPESASDAIKFVLRDAM HEMEEMIETKGRAALPGLDVLIYLKITGLLFPTSDFWHPVVTPALVCLSQLLTKCPILSLQDVVKGLFVCCLFLE YVALSQRFIPELINFLLGILYIATPNKASQGSTLVHPFRALGKNSELLVVSAREDVATWQQSSLSLRWASRLRAP TSTEANHIRLSCLAVGLALLKRCVLMYGSLPSFHAIMGPLQALLTDHLADCSHPQELQELCQSTLTEMESQKQLC RPLTCEKSKPVPLKLFTPRLVKVLEFGRKQGSSKEEQERKRLIHKHKREFKGAVREIRKDNQFLARMQLSEIMER DAERKRVKQLFNSLATQEGEWKALKRKFKK

PCT/US2003/028547

1506/6881 FIGURE 1394A

CCCTCCGCCTCGCCAAGCAGGGAAGGGGAGAGAAGCAGGAGTCGGGAGACTGCACAGGCCAGAAAGTCTGCGGA GCGGGCCGCCCCTGGCCCGCCCGGGCTCCAAGTCCCGCGTCGCCGCCCTGGCGGGGACGGTGCAGCAGGCGGC GGGATGCGGCGGGCGGCAGCCTGAGCGCCCCGG<u>ATG</u>GCCCGCGGCGGGGCGGCCTGCAAGAGCGACGCGGCG TCTGCTCAAGAATTTGGAGTCTAATGCGCAGACCCCCTCGGAAACTGGCTCCCCATCAAGGAGGAGGAAGAGAGA AGTGCAGATGTCGAAGGAAGCAAGCAGCTGTTGATGAATGTGAGCCGCCTTCCAACAGCAATATCACAGCATTCGC CCTGAAGGCCAAAGTCATCTACCCCATCAATCAGAAGTTCCGGCCTCTGGCCGATGGCTCCTCCAACCCGTCTCT GCATGAAAACTTAAAGCAGGCTGTTTTGCCACACCAGCCGGTAGAGGCCTCTCCTTCCAGCAGTCTGGGGAGCCT GAGCCAGGGTGAGAAGGACGACTGCAGCTCCTCATCCAGCGTCCACTCGGCCACCAGCGATGACAGGTTTCTCAG CCGCACCTTCCTCCGGGTGAACGCCTTCCCTGAAGTGCTGGCCTGCGAGAGTGTAGACGTTGACCTGTGTATCTA CAGCCTTCACTTAAAAGACCTGCTGCATTTGGACACGGCACTGAGGCAGGAAAAGCATATGATGTTTATTCAGAT TTTTAAAATGTGCCTCCTTGACCTTCTTCCTAAAAAGAAGTCAGATGAATTATACCAGAAGATCCTTTCAAA ACAAGAAAAGATTTGGAGGAACTAGAAAAGGGACTTCAGGTCAAACTGTCAAACACAGAAATGTCGGGGGCTGG GGAAGCTTTCTGGAAACAGATGGCAAATATCCAGCACTTTCTTGTGGACCAGTTTAAGTGTTCCAGCTCCAAAGC CCGACAGCTGATGATGACTCTGACGGAAAGAATGATTGCAGCCGAAGGGCTATTGTGCGATTCTCAGGAGCTGCA GGCTCTGGACGCCCTGGAGAGGACGATGGGGCGGCGCACATGGCAAAAGTGATTGAGTTTCTGAAGCTGCAAGT CCAGGAGGAGACCAGGTGCCGGCTGGCTGCCATCTCCCACGGCCTGGAGCTGCTGGTGAGGGGAAGCTGTC CGGGCGGCAGAAGGAGCTGCTCACGCAGCAGCACAAGGCCTTCTGGCAGGAGGCAGAGCGCTTCAGCCGGGA GTTTGTCCAGCGAGGCAAAGACCTGGTCACGGCGTCTCTGGCTCACCAGGTGGAGGGAACGGCAAAACTCACGCT GGCCCAAGAGGAGGAACAGAGAAGCTTCCTGGCTGAGGCCCAGCCGACTGCTGACCCGGAAAAGTTTCTCGAGGC TTTTCATGAGGTCCTGGAGAGGCAGAGGCTGATGCAGTGTGACCTGGAGGAAGAGGAGAATGTCAGAGCCACCGA GGCTGTGGTTGCACTCTGCCAGGAGCTGTACTTCAGCACCGTGGACACTTTCCAGAAGTTCGTGGATGCCCTGTT CCTTCAGACGCTCCCTGGCATGACTGGCCTCCCCCGGAAGAGTGTGACTACTTGAGGCAGGAAGTCCAGGAGAA CGCTGCCTGGCAGCTGGGGAAGTCAAATCGCTTCCGGAGGCAGCAGTGGAAACTCTTCCAGGAGCTCCTAGAGCA AGACCAGCAGGTGTGGATGGAGGAGTGTGCGCTGTCCAGCGTGCTGCAGACACCCTGCGGGAGGACCACGAGGG CACCATCCGCGGCGTCTTGGGCCGACTGGGCGGCCTCACTGAAGAGTCCACGCGGTGTGTCCTGCAGGGGCATGA CCTGCTGTTGCGCTCAGCCCTCCGGAGGCTGGCACTCCGCGGCAACGCCCTGGCCACCCTGACGCAGATGCGGCT ATCGGGGAAGAGCACCTCCTGCAGGAGCTGCGGGAACAGCGTGCACTGGAGCAGGGGTCCTCCCAGTGCCTGGA CGAGCATCAGTGGCAGCTGCTCAGGGCCCTGGAGGCGCGTGTGCTGGAGGAGGCCAGCCGGCTAGAGGAGGAAGC ACAGCAGACACGCTGCAGCTCCAGCAGCGCTCCTGGCCGAGGCCCAGGAGGTGGGGCAGCTTCTGCAGCAGCA GGATGACTTCAAGAGGACACTGATGGAGGCGGCAGTGGAGAGCGTCTACGTGACCAGCGCTGGTGTCAGCCGCCT GGTGCAGGCGTATTACCAGCAAATCGGAAGGATCATGGAGGACCACGAGGAGAAAAACTGCAGCACCTGAAGAC CCTGCAGGGTGAGAGGATGGAAAATTACAAACTGCGGAAAAAGCAAGAACTCAGCAACCCTTCGTCGGGCAGCAG GACGGCAGGTGGCGCTCATGAGACCTCCCAGGCGGTCCACCAGAGGATGCTGTCCCAGCAGAAGAGGTTCCTGGC CCAGCTGGAGACCCAGCTACAGGAAGCTGAACAGAACTTCATCTCCGAGCTGGCAGCCTTGGCCCGAGTGCCCCT TGCTGAAAGCAAACTGTTGCCTGCTAAGCGTGGGCTGCTAGAGAAGCCCCTAAGGACTAAAAGGAAGAAGCCCCT GCCCCAGGAAAGAGGGGACCTGGGGGTGCCCAACAATGAGGACCTTGCCTCCGGGGACCAGACCTCAGGCTCACT CAGCAGCAAAAGGCTGAGTCAGCAAGAAAGTGAAGCTGGGGACAGTGGGAACTCAAAGAAGATGCTAAAGAGAAG ${\tt AAGCAACTTG} \underline{{\tt TAG}} {\tt TTAAGACCAGTCGGTGGGACAAGACCTGAAGCCCTGGGTCTGGGTGTGAATTCCACCTTCC}$ CTCCTGCAGTGCTGAGAGGCAGCGAGAGGACAGCGGCATCTCTAGGCTCTTCTGAGAGGGACAGAGAA AGAATAGAAATGTGCCCTAAAAGCATAAATGAGTATCACCTGAGAAAATTAGGCATTCCCGTCTTGGAAACACGT CTCTGTGAGTTTGCATTTCATTTGGCTTGGAGCCCTGGCTCGATGCCTCATGGATCTTTCTCCCCAAGGAGGGAC GTCTTGAGGGGTCCGAGCCTCAGGCCAAGGACCCCTGATGCAGACTCTGGAATCCCTGGCCCAAAGGCCTGTCTG GGCCCATCTGGGGCTGAGGACACACAGATACATAATGACACCTGCAGAAATGTATTCTCTGAGGACACTTAGAAT

PCT/US2003/028547

1507/6881 FIGURE 1394B

TGCAGAGAGATGTCATGGGGGCACCTGCTCCCTGATAGATGCTGAGAGCATCCAGAAACTTCCAGACCAGCCC GAGGGGCCTTTCCCACCTGGAGAGAACTTCCAGACCAGCCCTCATACCACAGCCAAGAGGGGCCTTTCTCACC TGGAGAGAAATTTCCAGACCATCCCCTCTCACCACAGCCAGGAGAGGCCTTTCCCACCGGTAGAGAAACTTCCAG ACCAGCCCTCACACCACAGCCAAGAGAAGCCTTTCCAGCCTGGAGAGAAACTTCCAGACCAGCCCTCTCACTAC AGCCAGGAGAGGCCTTTCCCGCCTGGAAACTTCCGGACAAGCCTCTCACACACCACAGCCAGGAGAGGCCTTTCC CACCTGGACAGAAACTTCCAGACCAGCCCCTCTCACCACAGCCAGGAGAGGCCTTTACCACCTGGAGAGAAGCTT CCAGACCAGCCCTCACACCACAGCCAGGAGAGGCCTTTCCCACCTGGAGAGAAACTTCCAGACCAGCCCCTCAT ACCACAGCCAAGAGGGGCCTTTCTCACCTGGAGAGAAACTTCCAGACCAGCCCCTCACACCACCACCAGGAGAGA CCTTTCCCACCGGGAGAGAACTTCCAGACCAGCCCCTCACACCACAGCCAGGAGAGGCCTTTCCCACCGGGAGA GAAACTTCCAGACCAGCCCTCTCACTACAGCCAGAAGAGGCCTTTCCCACCGGGAGAGGAACTTCCAGACCAGCC CCTCACACCACAGCCAGGAGAGGCCTTTCCCGCCTGGAGAGAGCTTCAGGCCAGCCTCCTCACACCACAGCCAGG AGAGACCTTTTCTGCCTGGAGAGAACTTTCAGACCAGCCCCACACACCACAGCCAGGAGAGGCCGTTCCTGCCT GGAGAGAAGCTTCCAGACCAGCCCTTCACACCACAGCCAGGAGAGGCCTTTCCCACCTGGAGAGAAACTTCCAGA CCAGCCCCTCTCACCACAGCCAGGAGAGGCCGTTCCCACCTGGAGGGAAAATTGCTCCTTTGATGGAGGTTAGGG ACTGTCACCCTCAGCACTGTGAACATACCGGGCGAGATCATTCTTCAGGGGAAGGAGCTGCCCAGAGCATCACAG GATGTTCCAGTGTCCCTGGTCTCTGCCCACCAGATGCCAGCACTCCCACCATTCGTGGCAACCAAGGATGTCTCC AGACACTGCCCCGTGTCCATGGGGTTATCACCCACTGTGCTGAGTCAAAGGGTGCCTTGCCCTGGTCTAATCCAG GACATAGCCGTGGATACGTCCAAAAATCCCCAGAACCTAGTGAGCCCTCTGGCTCTGGGAGCCCCTATCTCAGGA ATTTTCAGGGTCATTTGTGACTTTTCATTTCTTAAAACCTGAAATAGACTCTCTTAGAAACAAGTGACTCCTTCC CAGTGGCCAAAACTTAATCATCAGAGCGCTTCCTTCAGTTCCTCACCCATCAGCCAGTGGGCTCTCCAAAGTTAA CCAACAGCTCCCTCTTGTGGTTCACTAAAAAACTTGGTTATTCCATGGAGTTGTGCAAAGCTATGGCTTCCTTGG TGCAATATTCTTAAAACCTGCTTTGCATAGAAATCACTTTTGCCCAGGCTGGAGTGCAGTGGCGTGATCTCGGCT CATGGCAATCTCCATCTCCCGGGTTCAAGCGATTTTCCTGCCTCAGCCTCCCCAGTAGCTGGGACTACAGACGTG CTCTCGAACTCCTGACCTCATCGTCCACCTGCCTCGGCCTCCCCAAAGTGCTGAGATTAGGCGTTAGCCACCGCG CCCGGCCAGAAATCACTTTTATATTGTCACATGGGCCCTCTGCACAGAGTCCGATGGCTCCTCCCGGGGAAGCCT GATTTTGTGACGTGTATAGTAAATGCAGGCCCTCTGGCAGCACCATAATTGGTCGGTTACCCTGAGCCCAGAG CTCTGAAAGCATCTGTGGAATGATCACGGGACCCTTCTCCTCTGAGAAGGCTCCCGGCTGCCTCCCCGCCACCGA GCTTGTAGCCTGAATGCCTGGCTGTCGCATGGAGCATTTTGCTTCTGGGGTGTCTTCCTTAGCCAAAGGGAACGT GTCATTTGCTCGACCCTGGCCCACCCTTGCCGCCCAGCTGTTGTGCTGGGCACAGTCTGGGGCACAGGCCTCCAT GATGAAGACGCGTGGCTGTCGGTGCTTTCATCCGTCACAAACTGGCACCTGTACCTGCCAGCAGGAGCATGATG GGGACTTCCATGCTGGAATTGCTCCCTGATTAAAATGAGATATGGCTATTTGGAAGACACTGCATTTTAGCCAGT GTACCTGGGCACAGACTCGGGGCTGCCCTGAAGCTGATGAAGGCTTGAAGGACGGAAGGGCTGAGCCACATGAAG GCAGCACTCAGGGCCAGGGGAGAGAGAGAGAGAGGATCAGCAGTGCAGCCCCAGGATGCCTCGCAGACGTGCCTTCTG CCATGATTGTGAAGTTCTAGCCACGTGGAACTCTCTCGGAAGAACTGGTTGTTAAAGAGCACCTCTGCCTTCTTC CTCTGTTGCCATGTGATCTCTGCACACGCTAGCTCTCCTTCGCCTTCTGCCATGCTGGAAGTAGCCTGAGGCCCT CACCAGAAGCAGACGCTGGCACCGTGCTGCTGTACAGCCTGCAGAGCCGTGAGCCAAGTAAACCTCTTTAATTA $\tt CCCAGCCTCAGGTGCTCCGGGAACGCCTTCCGCGGAATGAAGCGGCCCATGCCCTTGTTGACGTTGATGTTTCCG$ TCTTCAAAGACGATCTTGCCCTGGCTGATGACCACTAGTGGGGAGCCGTGGCACTCCATACCCTCGAAGATGTTG TACTCCACCGCCTGCACCAACAGCCTCAGCGTTACTTCCCAGGATTTGCTCTGCCCCAAACGAGCTGTTCATAAC TGTAATATTCCACTGTATGGTCCACAGTGTATATAACCAACAACTCACCGTTGCGCATGTAGGCTGCCGGTGGCT TTCTATAATCAAATCAATATTGTTCTGGGGCATCACAAAGAGGAAGGGGGTCCCCCXGGGGTTATGCAATGTGGC TTTTTCTCTAGGTT

PCT/US2003/028547

FIGURE 1395

MARGGAACKSDARLLLGRDALRPAPALLAPAVLLGAALGLGLGLWLGCRAGRQRTRHQKDDTQNLLKNLESNAQT
PSETGSPSRRRKREVQMSKDKEAVDECEPPSNSNITAFALKAKVIYPINQKFRPLADGSSNPSLHENLKQAVLPH
QPVEASPSSSLGSLSQGEKDDCSSSSSVHSATSDDRFLSRTFLRVNAFPEVLACESVDVDLCIYSLHLKDLLHLD
TALRQEKHMMFIQIFKMCLLDLLPKKKSDDELYQKILSKQEKDLEELEKGLQVKLSNTEMSGAGDSEYITLADVE
KKEREYSEQLIDNMEAFWKQMANIQHFLVDQFKCSSSKARQLMMTLTERMIAAEGLLCDSQELQALDALERTMGR
AHMAKVIEFLKLQVQEETRCRLAAISHGLELLAGEGKLSGRQKEELLTQQHKAFWQEAERFSREFVQRGKDLVTA
SLAHQVEGTAKLTLAQEEEQRSFLAEAQPTADPEKFLEAFHEVLERQRLMQCDLEEEENVRATEAVVALCQELYF
STVDTFQKFVDALFLQTLPGMTGLPPEECDYLRQEVQENAAWQLGKSNRFRRQQWKLFQELLEQDQQVWMEECAL
SSVLQTHLREDHEGTIRGVLGRLGGLTEESTRCVLQGHDLLLRSALRRLALRGNALATLTQMRLSGKKHLLQELR
EQRALEQGSSQCLDEHQWQLLRALEARVLEEASRLEEEAQQTRLQLQQRLLAEAQEVGQLLQQHMECAIGQALLV
HARNAATKSRAKDRDDFKRTLMEAAVESVYVTSAGVSRLVQAYYQQIGRIMEDHEERKLQHLKTLQGERMENYKL
RKKQELSNPSSGSRTAGGAHETSQAVHQRMLSQQKRFLAQFPVHQQMRLHAQQQQAGVMDLLEAQLETQLQEAEQ
NFISELAALARVPLAESKLLPAKRGLLEKPLRTKRKKPLPQERGDLGVPNNEDLASGDQTSGSLSSKRLSQQESE
AGDSGNSKKMLKRRSNL

PCT/US2003/028547

1509/6881 FIGURE 1396

ACGGGCGCCGAGCCTCCGTGCTCTCTATCCCTCCCGGGCCTTTGTCAGCGCGCCCGCTGGGAGCGGGGCCGA AGGGCAAGAAGAGCATCCCGCACATCACGAGTGACCGACTCCTCATCAAAGGTGGACGGATCATCAACGATGACC GAGTGAAGACCATTGAAGCCAACGGGCGGATGGTTATTCCCGGAGGTATTGATGTCAACACGTACCTGCAGAAGC CCTCCCAGGGGATGACTGCGGCTGATGACTTCTTCCAAGGGACCAGGGCGGCACTGGTGGGCGGGACCACGATGA TCATTGACCATGTTGTTCCTGAACCTGGGTCCAGCCTACTGACCTCTTTCGAGAAGTGGCACGAAGCAGCTGACA CCAAATCCTGCTGTGATTACTCCCTCCACGTGGACATCACAAGCTGGTACGATGGCGTTCGGGAGGAGCTGGAGG TGCTGGTGCAGGACAAAGGCGTCAATTCCTTCCAAGTCTACATGGCCTATAAGGATGTCTACCAAATGTCCGACA GCCAGCTCTATGAAGCCTTTACCTTCCTTAAGGGCCTGGGAGCTGTGATCTTGGTCCATGCAGAAAATGGAGATT TGATAGCTCAGGAACAAAAGCGGATCCTGGAGATGGGCATCACGGGTCCCGAGGGCCATGCCCTGAGCAGACCTG AAGAGCTGGAGGCCGAGGCGGTGTTCCGGGCCATCACCATTGCGGGCCGGATCAACTGCCCTGTGTACATCACCA AGGTCATGAGCAAGAGTGCAGCCGACATCATCGCTCTGGCCAGGAAGAAAGGGCCCCTAGTTTTTGGAGAGCCCA TTGCCGCCAGCCTGGGGACCGATGGCACCCATTACTGGAGCAAGAACTGGGCCAAGGCTGCGGCGTTCGTGACTT CCCCTCCCTGAGCCCGGACCCTACCACGCCCGACTACTTGACCTCCCTACTGGCCTGTGGGGACTTGCAGGTCA CAGGCAGCGGCCACTGCCCTACAGCACTGCCCAGAAGGCGGTGGGCAAGGACAACTTTACCCTGATCCCCGAGG GTGTCAACGGGATAGAGGAGCGGATGACGGTCGTCTGGGACAAGGCGGTGGCTACTGGCAAAATGGATGAGAACC AGTTTGTCGCTGTCACCAGCACCAATGCAGCCAAGATCTTTAACCTGTACCCAAGGAAAGGGCGGATTGCCGTGG GCTCGGATGCCGACGTGGTCATCTGGGACCCCGACAAGTTGAAGACCATAACAGCCAAAAGTCACAAGTCGGCGG TGGAGTACAACATCTTCGAGGGTATGGAGTGCCACGGCTCCCCACTAGTGGTCATCAGCCAGGGCAAGATCGTCT TTGAAGACGGAAACATCAACGTCAACAAGGGCATGGGCCGCTTCATTCCGCGGAAGGCGTTCCCGGAGCACCTGT ACCAGCGCGTCAAAATCAGGAATAAGGTTTTTGGATTGCAAGGGGTTTTCCAGGGGCATGTATGACGGTCCTGTGT ACGAGGTACCAGCTACACCCAAATATGCAACTCCCGCTCCTTCAGCCAAATCTTCGCCTTCTAAACACCAGCCCC ${\tt CCGGCCACCGCATCGTGGCCCCCCTGGTGGCCGCTCCAACATCACCAGCCTCGGT{\tt TGA}{\tt ACGTGGATGCGCGGAG}}$ GAGCTAGCCTGAAGGATTCTGGGAATCATGTCCATCCCTTTTCCTGTCAGTGTTTTTGAAACCCACAGTTTTAGT TGGTGCTGATGGAGGGGGGGGAAGTCGAAGGATGCTCTTTCCCTTTTCTGTTTAGGAAGAAGTGGTACTAGTGT GGTGTGTTTGCTTGGAAATTCCTTGCCCCACAGTTGTGTTCATGCTGAATCCACCTCGGAGCATGGTGTTTTCAT TCCCCCTTCCTAGTGAACCACAGGTTTTAGCATTGTCTTGTTCTGTCCCTTCCACTTCTAACTCCACTGGCTCCA TGATTCTCTGAGTGGTGGTTCCTTTGCACCCTGTAGATGTTCTAGGATAGTTGATGCATGTTACTAAATTACGTA TCGCCCCACCTCCACCTGTGAGATCCGTGAATTCTCGGAATGGCAGGGGAAGCCTTGCACTAGGTTGCAGAGAAG TGTGTTCTTCAAGCCAGCTCTAGGCTTCAGGCCGAGCCAGGTTCACACTCAGAAAGAGGTCTCCCCATCCCCATT CGGGGCTGACGATGGGGGGCTGATGGCTGCCCCTGCGTGGCCTGAGTCCTGGTCCCTCTGAGGCAGTTGACGGGG AAA

PCT/US2003/028547

1510/6881 FIGURE 1397

MSYQGKKSIPHITSDRLLIKGGRIINDDQSLYADVYLEDGLIKQIGENLIVPGGVKTIEANGRMVIPGGIDVNTY LQKPSQGMTAADDFFQGTRAALVGGTTMIIDHVVPEPGSSLLTSFEKWHEAADTKSCCDYSLHVDITSWYDGVRE ELEVLVQDKGVNSFQVYMAYKDVYQMSDSQLYEAFTFLKGLGAVILVHAENGDLIAQEQKRILEMGITGPEGHAL SRPEELEAEAVFRAITIAGRINCPVYITKVMSKSAADIIALARKKGPLVFGEPIAASLGTDGTHYWSKNWAKAAA FVTSPPLSPDPTTPDYLTSLLACGDLQVTGSGHCPYSTAQKAVGKDNFTLIPEGVNGIEERMTVVWDKAVATGKM DENQFVAVTSTNAAKIFNLYPRKGRIAVGSDADVVIWDPDKLKTITAKSHKSAVEYNIFEGMECHGSPLVVISQG KIVFEDGNINVNKGMGRFIPRKAFPEHLYQRVKIRNKVFGLQGVSRGMYDGPVYEVPATPKYATPAPSAKSSPSK HQPPPIRNLHQSNFSLSGAQIDDNNPRRTGHRIVAPPGGRSNITSLG

PCT/US2003/028547

FIGURE 1398A

TTTCTCCTTGGACCAAGATGACTGATGGAAAACTCTCCACCTCTACAAATGGCGTAGCCTTCATGGGTATTCTGG ATGGTCGACCAGGAAACCCCCTTCAGAACCTGCAACACGTCAATCTCAAGGCGCCCCGACTCCTCTCCGCGCCCTG AGTACGGGCCCAAGCTGAAACTCAGGGCTTTAGAAGACCGGCACAGCCTCCAGTCCGTGGACTCGGGGATTCCTA TCATCCCGAGCGGCCTTCCAGAGCGCCTGCGCGCTGCCATCCTGTGCGCCACCAGCTCCTAGCAGCACCGAGC GGGAACAGAGCGTGCGCAAATCCTCCACGTTTCCCAGGACAGGCTATGACTCGGTAAAGCTCTATAGCCCGACCT CCAAAGCCCTGACCCGCAGCGATGATGTCTCCGTCTGCAGCGTGTCCAGTCTTGGGACAGAGCTGTCCACCACGC TGTCCGTCAGCAATGAGGACATCTTGGACCTTGTGGTCACGAGCAGCTCCAGTGCCATTGTGACCCTGGAGAATG ACGATGACCCACAGTTTACCAACGTCACCTTGAGCTCTATCAAGGAAACCCGTGGCTTACACCAGCAGGACTGTG CTAGAAAACAAAGTGCAAGGCTTGACAAACACAATGACTTGGGATGGAAGTTATTTGGGAAAGCGCCACTCCGAG AGAATGCCCAGAAGGATTCAAAGAGAATACAGAAGGAATATGAAGACAAGGCTGGAAGACCTAGCAAGCCACCCT CTCCAAAGCAGAATGTGAGGAAGAATCTTGACTTTGAACCACTTTCCACCACCGCACTCATCCTCGAGGACAGAC TTGGAAACGCTGTGCTCACCTGGAATAATGAGATCTTACCTAACTGGGAAACAATGTGGTGCTCTAGAAAAGTTC GAGATTTATGGTGGCAGGGAATCCCTCCAAGTGTGAGAGGCAAAGTCTGGAGCTTAGCCATTGGCAACGAGTTAA ATATCACCCACGAGCTCTTTGACATCTGTCTTGCCCGAGCCAAGGAGGTGGCGGTCCCTTAGCACAGGAGGCT TTTCTAGAACATTTCCTAATCTCTGCATTTTCCAGCAAGGTGGTCCATATCATGACATGTTGCACAGTATTTTGG GCGCTTATACTTGTTACCGGCCAGATGTGGGTTATGTCCAGGGCATGTCCTTCATAGCAGCAGTGTTGATCTTGA ACTTAGATACTGCAGATGCCTTTATTGCCTTTTCTAACCTTCTGAATAAACCCTGTCAAATGGCGTTTTTTAGAG TGGACCATGGCCTTATGTTGACTTATTTTGCTGCATTTGAAGTATTCTTTGAAGAAAATTTGCCGAAATTATTTG TGCCCCTCGACCTGGCCTGTCGTATCTGGGACGTGTTCTGTCGCGATGGGGAAGAGTTCCTGTTCCGCACGGCCC TGCCCGAGGACCTGCCCGCCGAGGAGCTGTTTGCCTCCATCGCCACGATCCAGATGCAGAGCCGAAACAAGAAGT GCTGCAGCGGGAATTCGCACTCGGCACCAATCAGAGCCCCATGCCGCGCCCCTCTGTTGTTTCAGACTGACACC CGGGCAGCCGAGAAGAACAGACGCTCTTTAAGTTTGATTCCTAACACTGGAGTTGGCCTTAAACAAAACAAAACAC AAAAACTTTTAAAGAATTAAACCAAGGCTTAGCCTTAAGCAGCTCAGTGGAAGGATGAGCTGCTGCGGACCACAG CCAGCCACTGCATCTGCACAGTTGAACGATGGGCAGTGGCTCACCCCCACTCCTTTATTTCAGCAAAAGCTA ATTAAATTGTAATGTTCTATGTCAACTACTGGGAAGTATGTTACAGTCTTAGCCAGGATGCATGAGAGATGTTA TTTGGGAGACTTGAGATGCTTTGGCTGATATTTACATGTTTTCGATAAGAAAGGGATCGCTGATTGAGTTATTGA GATAGTTTTTCCAGAGCTGGAGGTCACGTTTCTAAAACTCACCTACGAAAGATAGCATTAAAAGGAACAGGGGCTC TCTGAGGATGGCCACTGATGTGTTTTGTGGATACCTGGGCATCGACCCAGCCTGCAGGTGAGCTCTGGGCCATG TTGCCTTGACACAGTCACAGTGTAGAGGCTGCAGGTGCACACGTGGGCTCCAGTGGGACTGCGCTCTGGGAGACT GCTCCCTGGCATCGGTCCTGCGGAGGTGGAAAGTTCGAGAGGAGGAGCCTATTTGCGAGGAAGCCCTGTGGCAATA GTGGCTGGGCCCTCTCCCACCTGCCTGTTCAGTGGAGGCCAGGGCAGCAGCCCAGAACAGCACATGTGGGGGAGG TGGCCCCTTGTGCCAGCAGTGGCTCCTCTCTGCCTTTGAGCCCTGCACAGCTGGACCCATCCTAAGTGCCAGTGA TAACAGCCTAGACAATCTCGTCAGATGCTCATACTGGACCATCAGCCTCCCCATTTTAGCTGACTTTCCCAGGGT CGTTGGCAAATTTTTTGTTCTGTCTTTTCCTTGACTAATTGTAGAACTTTGTGTGAGGACTTTGGTTATCCAAAA TCACAGAAATGAACCGTTTTGCAGCTGCGCAGTCTAAAGGGCAGGCCAGTGTCTGGAAGCAGGGCCCACGTGGCG GTCCGCTGGCAGGCTGGTCCTGGGGAGCATTCTGCGGACCCGGTCACGGGCTTGGTTAGTCATGCGTACATGTGT GCCTTGGGGTGCTCTGCACTCCACGGCCCTTCTCAGCCACACTTCCCACCCCAGGGGGGTGCCCCCAGGCTGATCT CATTTCTGATGTTGAGGGCTGTTTGGCTCTGTATAGCTTGTAACAGGAGCCTTGGGCTAGGGGCTGGGGAA

PCT/US2003/028547

FIGURE 1398B

GCAGGTTGCTGAGCCAGTGGCTGCCCCGTGCCCTCCTTCCCAGCACTATCATGTGTCACGTTTCCCGGACTCTGC CCCTACATCTCAGCTGAATCTCCAGGGAGGCTGCAGAGCATCGTGGAGACCACTTTCTGCCTCGGCCTTTAAATG CTGACTCACCTCCTCTGGAGGAGGCGTCCTGTCTTCACGGGGGGGTCCCGGTGGCCTCCAGACGTAGCCATTTC CTGACATCAAGATGTTGAATGTAATCTGGTCTGAGCTGGGCCTGTGGGAGGGCCCCTGAGGCCTGTGCGCTGT TGTCCTCGCAGATGTACTTATTTTTGTTCATGATACGGGCGTTCCGTTCCTTAAAGATGTATATATTTTCTTACT GTACATAAAGATGTTCCTTAAGTCGTACAGAAGGTGGCGCGCAAAGGGCCTCGTGCAGTGTGTTCAGATTGCCC CTGGGGATCTTCTGTGTCTTCAGCGCCCAGCCCTGCGTGTTCCTGGTGAAGCAGTTTCACATCAGTCTCTCCAGA TAGCACTACGATGTATTCCGCTTCTGAACAGGATCCCATGCCAGTGTGGAACACCTTCCCAATCTTAGTTCAGAA GTGGCTTGTATGACCTGTTCAGGGGTCACATGAGGTCTCGCCAGTTTCCTGGGTCCTCTTCAGAGGCCAGAAAGT TCTAAGTTCTGAGTCCCCGGCCAGGGTCCCTTAACACCTCGGCACAGAGGCTGTTGGCAAGTGTAGAGGCTGCCT CTGTGTGTGTTTAAGTAAACTGGAAATGAGACATTGACGTGCTCCTCCAGAGGTCTGCACACTCCACTTCA CATGCCGTTGACTCTCACAGTCTAAGACTTCAGGGCCGGGACCTTTGTCCAGCCTGCACAGTAGAGTGAGGCTGC CTCTCCCGCCAGGCATTGGGATCCCATTTAGAAACGGCATTCACTTCAGAAGGTACTTTTTAACTGCTCAGTTTT TGACTATTTTAAATAGTTTGCTGAAAACTCCTGATAACACTTGCTACATATCATGTTTTAATTGCTTGTACAGTT AACCTTTAATTTTAGTAAAGTGTATCAAAGTAGGACTTTTTTGAATTGTAAATAGGTGGTTTTATTAAATA AAAGTCAATGTAAAATTGTT

PCT/US2003/028547

FIGURE 1399

MTDGKLSTSTNGVAFMGILDGRPGNPLQNLQHVNLKAPRLLSAPEYGPKLKLRALEDRHSLQSVDSGIPTLEIGN PEPVPCSAVHVRRKQSDSDLIPERÅFQSACALPSCAPPAPSSTEREQSVRKSSTFPRTGYDSVKLYSPTSKALTR SDDVSVCSVSSLGTELSTTLSVSNEDILDLVVTSSSSAIVTLENDDDPQFTNVTLSSIKETRGLHQQDCVHEAEE GSKLKILGPFSNFFARNLLARKQSARLDKHNDLGWKLFGKAPLRENAQKDSKRIQKEYEDKAGRPSKPPSPKQNV RKNLDFEPLSTTALILEDRPANLPAKPAEEAQKHRQQYEEMVVQAKKRELKEAQRRKKQLEERCRVEESIGNAVL TWNNEILPNWETMWCSRKVRDLWWQGIPPSVRGKVWSLAIGNELNITHELFDICLARAKERWRSLSTGGSEVENE DAGFSAADREASLELIKLDISRTFPNLCIFQQGGPYHDMLHSILGAYTCYRPDVGYVQGMSFIAAVLILNLDTAD AFIAFSNLLNKPCQMAFFRVDHGLMLTYFAAFEVFFEENLPKLFAHFKKNNLTPDIYLIDWIFTLYSKSLPLDLA CRIWDVFCRDGEEFLFRTALGILKLFEDILTKMDFIHMAQFLTRLPEDLPAEELFASIATIQMQSRNKKWAQVLT ALQKDSREMEKGSPSLRH

PCT/US2003/028547

1514/6881 FIGURE 1400

GCTATGCCGGTGGACATCACGCTGCTATTCCGGGCCAGCGTCAAGACCGTGAAGACGCGGAACAAGGCGCTGGGA GTGGCGGTGGGCGGGGTCGATGGCAGCCGGGACGAGCTGTTCCGCCGGAGCCCCCGGCCCAAGGGCGACTTC TCCAGCCGGGCCCGCGAAGTGATTTCTCACATTGGCAAACTGAGAGATTTTCTTCTGGAACACAGGAAAGATTAT GCCCAGATATTCATGAGGACCTGTTCAGAAGCAATTCAGCAACTACGAACAGAAGCTCACAAGGAGATACATTCC CAGCAAGTGAAGGAGCACAGGACCGCTGTTTTGGATTTCATTGAAGATTACTTGAAAAGAGTATGTAAACTTTAC TCAGAACAGAGCCATCCGAGTTAAAAGAGTGGTGGATAAGAAAAGATTATCTAAGCTGGAACCAGAACCAAAT ACAAAGACAAGAGAATCCACATCTTCTGAGAAAGTTTCACAGAGTCCTTCAAAAGACTCTGAAGAAAACCCTGCC ACTGAAGAACGTCCAGAAAAAATTTTGGCTGAAACACAACCTGAATTGGGAACGTGGGGAGATGGCAAAGGCGAA GATGAGTTATCCCCAGAAGAAATACAAATGTTTGAACAGGAAAATCAGCGACTAATTGGTGAAATGAACAGCTTG TTTGATGAAGTGAGGCAAATCGAAGGGAGAGTGGTTGAGATTTCCAGACTCCAAGAGATATTCACGGAAAAGGTT GAAGACATAAGAGAGGCCATTAAAAACAACGCTGGCTTCCGCGTGTGGATCCTCTTCTTCCTCGTGATGTGCTCC TTCTCCTTGCTCTTCCTCGACTGGTACGACAGC<u>TAG</u>CCAGGGCCCACGGGGCCCAGCACGAGAGTCCTCATGGGC ACTCACAGACTGCGTGCTTTCATGTACTTCCAGTGCTGGAGCATGGTATGACCAGATTTTATCACAGTGCCATTT GAAGGGAAAGGAGTTCAGACAGACAGACGTATTCCCCAAAAAGGGATACCCCAGGCCGATGGTGTTCAGCCATTT TGCAGGAGTGGGTGATTAGCTGCTCCTTGAACTTGAGGCTGCCTTGGCAGCAGGGGCACAGCAGGCCTCAAGAGC CCCTAATTGTCTCAGGGTTCAAAGGAAGACACTGACCTTTCCCATCCCGGTAGCTTCAGGGAAGATCATAGTTAA AAAAA

PCT/US2003/028547

1515/6881 FIGURE 1401

MAVDITLLFRASVKTVKTRNKALGVAVGGGVDGSRDELFRRSPRPKGDFSSRAREVISHIGKLRDFLLEHRKDYI NAYSHTMSEYGRMTDTERDQIDQDAQIFMRTCSEAIQQLRTEAHKEIHSQQVKEHRTAVLDFIEDYLKRVCKLYS EQRAIRVKRVVDKKRLSKLEPEPNTKTRESTSSEKVSQSPSKDSEENPATEERPEKILAETQPELGTWGDGKGED ELSPEEIQMFEQENQRLIGEMNSLFDEVRQIEGRVVEISRLQEIFTEKVLQQEAEIDSIHQLVVGATENIKEGNE DIREAIKNNAGFRVWILFFLVMCSFSLLFLDWYDS

PCT/US2003/028547

FIGURE 1402

AGCTTAGAGGCAAAGTTAAGAGACTCATCAGATTCTGAGCTGCTGCGGGATATTTTGCAGAAGACGTGCTGTATT AGGTCTACCTGGCCTTTACCGTCCGCAACCCAGAGACGTGCCAGCTGTTCACCACCGAGCTAGGCTGGACTGGGA TCAGATGGGAAGTGGAAGCTCATCATGACCAGAAACTGTTTCCCTACAGAGAGCACTTGGAGATGGCAATGCTGA ACCTCACACTGTAGGACTCACACGCCTCCAACGGGCTTGTGAGAATTAAGTCACTCTCGTGGGAAGAATTTTT ATATGGGAAAGCGGATAAAACTTTCATTGCACTGGAATGTTTGGAAAATGTTAAATTCCAAATCAGGAACCACAA ACTGCCCTCTAATAAGACATTGGCTATCTAAGCATGTGGGTGCCCCCTTTCTGCCAGCAGTTCTGGTTCTTAAGA AAATCACCATAAATCAGACATGAAAATTCTGGCTCCAAAAATAGCATTTTCTTTGTGCAAATAAAAACGAGTGTA TCAAGTATGACGTTCCCCCAACGTGGACACACTTGTTTCCTCAGAAAGCCAAACCTGCTGCAGCTGCCACATCCC TGGACACACTCGTTTCCTCACAAAGCCAAGCCCGCTACAGCTGCCACATCCCTGGACACACTCGGTTCCTCACAA AGCCAAGCCCGCTGCAGCTGCCACATTCCTGGGCTTATGGTGCAGCAGGTGCTTTTTTCAAGACAGGAATCAAAG TGTAAGGAACATGGCAGAAAGGTGACACCTGGAGACCAAATGCAGGATGAGGAGTACTGCAGAGGTCACAGGGAA GTCACAGAACAGTAATACGCTGGCAGGGGCATGGGGCATGAAGAACAGAAGAAGACATTTGAGAAAAGCATCTGC AAAATACTAAAGAGCAGAGCTTACCTCATTTCCTGTCCCCACCCCATCCCAGGTCACCACCTGGCTGACCCCAGG TCCCCGACCCAACAACAACCCCTCCCAAGTCCCTAACTCCCTTACCTGGACTTGAGACCCTTCACACCCCAGCAG TGCTCCGCCTCCAACTTGACATCATGCTTTCTGGAAACTTCCCCGTGTGTCCCACTTTCCCACACTTGGTGCGCT GGAGCACCTTCCGGCCTCTACATGCTGTACGTTCCCCTGTGAGCACCCTCCTCTCGGCCTCTGGCCAACACAGTC CCACCCATCTGTGGGTAACAAGGGGGTGTGGGTGTTCTTTTCAGCCTTGCTAAACTGTCTGAATCAAGGATCACA CCTTAATCTACAGATGATCTGTGGCTACTTTCACGCCACAACAGAGTACCATGGTTCTGACAGAGACTGGGGGAC CCAGTCTAAATGACTTCCGACCTGGACCTTTACTGAAAATCCTCCCAATCATTCTGTTGACAAGAATGATGTATT ACTTTTTGCAATAAGAAACAAGTAACATTTGCAGAATTCCACCCATCTTTCAAGGCTGGTCCCAGAAGTTCCCTT TGCCCACACCTACCTGATCCTGACAACTTCCTAAACTGCAGCCCTGCCCACCCGGCTCCAGCATCATTTGTGG AGTGTCAGCTCCATAAATCCAGAGGGCAGGTGGGGGGTGTGTCCTAACATTCCCGAGCCTACTGTACCGAAACGGG ACAGCAGAGTAGGCCAGCATCTGTGACTTCTGCTCCCTCACTAGCTTTTCCACCAGACCCCACATGTTACCACCC TGGCTGTGGGAAGCAGGGATCAGGGAGTGTGGCTCGGTGCCCGTCTCCAGAACCCTGCCCACCCTGGCGTGGTGG CAGACATGGTTACCTGCAGCTGAGCTGCCAGTTCCTCTGAGTCCTCAAAGACCAGGCCGTTTTCTTCATGTTTCA CTAGCTCATGTAAACTGCAGAGAGAACCAAGGGAGCCTGAGAGCTGCCTGGGGAAGACACCAGACCCCTGGGGTG CCCAGCTTGCCTCCCACCCCACCCCACGCTCAAGCCAGGCTGGGGGTTGGAACAGGGGGTGTGGTTTCTGGGAGCT GGTTCTTAGATTTGGCATCTGAAGCATATAAAGGTCTGGGGGAGTGCACATCAAAATGGCCAAATCAATTTGAGG AGGGAGCCTTAAGGAAGGTTTGTACGTTCTGTGCTGGATGCTCTTCAAGTACTGAAGAATTATTTTTGCATGTTT TTCTTAATTCCATGGCCATGGAACAAGTAAAGGCAACCCCCTGGGGACTGGTTCAGCACATAAAAGATGACTTTT CTAGGACACC

PCT/US2003/028547

FIGURE 1403

MAPEENAGTELWLQGFERRFLAARSLRSFPWQSLEAKLRDSSDSELLRDILQKTVKHPVCVKHPPSVKYARCFLS ELIKKHEAVHTEPLDELYEVLAETLMAKESTQGHRSYLLPSGGSFTLSEITAIISHGTTGLVTWDATLYLAEWAI ENPAAFTNRGVLELGSGAGLTGLAICKMCRPQAYIFSDCHSRVLEQLRGNVLLNGLSLEADITANLDAPG

PCT/US2003/028547

1518/6881 FIGURE 1404

TTGTCCGTGGCTTCTCTGAGAAGAAAGTTGAAAAAGGGTAAAAGTTTTCAGGAATATTCGGGCTCTCTATTGCT GCCCTGGACATCGTCGAGCTGGCGGAACCGGAGGAAGTGGAGGTGCTGGAGCCCGAGGAGGATTTCGAGCAGTT GAACCGGAGCAAGCTGTGGGAGATGGACAATATGCTCATCCAGATCAAAACGCAGGTGGAGGCCTCGGAGGAGAG CGCCCTCAACCACCTCCAGAACCCGGGCGACGCCGAGGGCCGAGGGCCGAGAAGGTGCGAGAAGGCCGAGGA GAAGGCCAAGGAGATTGCGAAGATGGCAGAGATGCTGGTGGAGCTGGTCCGGCGGATAGAGAAGAGAGCGAGTCGTC ${\tt G}\underline{{\tt TGA}}{\tt GCGCGGTCGGCGGTTTCCAGCCAATGGATTCTGGTCAACTGGTGGAGATTGGCTGACACCCTGGAGAAGCC}$ GAAACCAGAGAGCCTTTTGTTTTCTCTTTTTTCCTGTCTATGCTCTGTCTCACTTAACACTACGTTTTCTGCTAT ATGCTCTCACATACAGGAATTAGGGCCTAGATTGTAAGCTCTTGCAGCAGTCACATTTGTTCCCGGGCTTTGGTG GTTATTTCTAAATTTTTGAGGTGCTTTGCTATTTCTTGTGTGACCTGATAGCTCCCTGGAACTTTGGGTCTGTGT GTGACACATGAGACTCACAGTTGGAGTTCTCCAGCTCTGGAGGTGCTGAAGGAGCTGCATTAATTCTGGAAGACG GTGAATCTGGAGAAGAGCTGGAGAATGGATAGTATTGTCTGTATTTGGAGACCTTAATTTCTGTGTGAGACCAAA GGAGGAGAGATGTGTTTTGTTCAAAATTTAAATTTGTTGTGGTACACTATCTTATGTAACCTGTCTGGTGAGTTT GTTTGGACAACCTAACTCAGCTTTATTTGACATGGAACCTAAAATAGAAGATAAGATCTTGATATTCTGTACAAG TTGATGTAATACCCTGATGCGTTTTAGAGGACTTGGCATAAAATGAAAGATTGGCAAAGGCCCTTGAGGGGCTTG GGGATGACAGTATGGAACTGTCTGCATTGGACCCTAAACTGGACTAGAAGAGGCATCTTCAAGGTTCATACGTTG AAAACTTACCATGTTAATAAAAGTATTCATTTGC

PCT/US2003/028547

1519/6881 FIGURE 1405

MRPLDIVELAEPEEVEVLEPEEDFEQFLLPVINEMREDIASLTREHGRAYLRNRSKLWEMDNMLIQIKTQVEASE ESALNHLQNPGDAAEGRAAKRCEKAEEKAKEIAKMAEMLVELVRRIEKSESS

PCT/US2003/028547

FIGURE 1406

GGCAGAGGAGCGGGCCCCGGCCCCAGCACCCCGCCCGCGCGGAGGCTGAGGAGCGGGTGGCTCGGCTGTG TAGGTAATTAGAGAAAATAATTTGATATGTTGTTAAAGAGTCATGACCACTGGAAGTATTTTCAGGACGTAGA AGATTGGAGCATTTGCGATGACCTTCCTGCAGGTGGAAGCATTGTGCACAGGTGGTTTGGTTTGACTCCCG GATATGAGAATATCAAGCTCAAAATTTATGTTGTGATGATGAATTTCTCCCACTTGTACTTTAGGTGGCCAACTG ACGAACTGTGTTCACCTGATAAGGAGTCGTGGCTGCTTGGACAGGCTCAAACCAAGAGAGCCTTTCGTTTTGTCT $\tt CCCCTGTTTTTCTGCCTGCGTTTTCTCCACATTAGCCACTCAATTTCCAGTACCATCCTGGCGGATGACTTCAGC$ ATTAGATGGTCAGGTGTATTTTTTTTATTAATAGGCGCATTCAGTTTGGAAAAGACAGCTTTTCATTAATGTCCCA CGTAAAGGAATATGGCCTATACAGTACGTACGCTGCTGCTGGTCATATTTGTTCCTGTGATCTTATTGTATTTT CAAAGTTTGGAAGTATACTCGTGTGCTTTGCTGTTTTTTTATGCTTCCTGGAATTTGGGGACTCATGAGAGACTT GAGGTTAGAGTTCTGCAAGTGAGAAGACACTACATGGTTGCAGCTGCCACATGAAGAACCCAAGCTCCTGTCAAA GTTGTGAATGCGACTTTGGATGAGATTAAGAAGGCCCAGTGGACGGTTGGTCTTGAAGAGTGGCAGTGTGGAT CATTTTGCTTTTCTTGGAATGTAATTTTCCTATGGCATGTTAACTGGTGCACATCGTGTAACCTGTCTGGTGAG CAACCTACAATTGGGATGAGTTCTAGGTACATGTGTTTGCTGACTTTGGGGGTAAACAACTTTGTTATAATACAGT GGTCCCAAACAGTCATTCCAGGCTTAGATGATGACTAGCCTAGGTCATCAGAGCCCAGACTCCACAGAGACTAAA ATCAGAGCTCTGTCTTGTTATGATAAATTTCATTTGCTTGGAAAAAGAAATGCTGAAAGCCAGTGTTTAGAATCT AAAAAAAAAA

PCT/US2003/028547

1521/6881 FIGURE 1407

 ${\tt MRPVDADEAREPREEPGSPLSPAPRAGRENLASLERERARAHWRARRKLLEIQSLLDAIKSEVEAEERGARAPAPREAEERVARLCAEAERKAAEAARMGRRIVELHQRIAGCECC}$

PCT/US2003/028547

FIGURE 1408

PCT/US2003/028547

FIGURE 1409

MTHTVQGLDVAGLLKALPPIKLHSCSAETDEDRQEHLGRNENGRAEQGARHTALQGTQKAAIPDSESSSCPGKAD GSCQKPGPGLVGLTGKLKLAPQLLIKQDIVSLLSNFVTRLCFPELLSPQFFVQEPQHLPMQSMDFSGLWGPLLAV ASPGLGFLVALWSARDLDWADWTVPHPDQLLMPRMCHNVNRVICIFGPPVKEPPTDVTPTFLTTGVLSTLRQADF EAHNILRESGYAGKISQMPVILTPLHFDRDPLQKQPSCQRSVVIRTFITSDSLTGIPATPGNEIPVEVVLKMVTE IKKIPGISRIMYDLTSKPPGTTEWE

PCT/US2003/028547

FIGURE 1410

GAGCGGCGCCCCGGCCGGCTGAGGAAAGCAGGAGGAGGTGGTGGCGGCGGGAAGATGCCGCTCTTTGGCGTA AATTGCAATCGATTAGGGATCGTTTCTCAGAATCAAGTTAGAAGTGAGAGTTCAGATAAGTGAGGCCGCCATTGC ATAATAAAAGTCCAGCACTAGGGCCCCTTCACCTACCAAACGCAAAGACCGCTCAGATGAGAAGTCCAAGGATC GCTCAAAAGATAAAGGGGCCACCAAGGAGTCGAGTGAGAAGGATCGCGGCCGGGACAAAACGCGAAAGAGGCACA GCGCTTCCAGTGGTAGCAGCAGTACCAGGTCTCGGTCCAGCTCGACTTCCAGCTCAGGCTCCAGCACCAGCACTG GCTCAAGCAGTGGCTCCAGCTCTTCCTCAGCCTCCAGCCGCTCAGGAAGCTCCAGCACCTCCCGCAGCTCCAGCT CTAGCAGCTCTTCTGGCTCTCCAAGTCCTTCTCGGCGCAGACACGACACAGGAGGCGCTCCCGCTCCAAATCCA AACCACCTAAAAGAGATGAAAAGGAGAGAAAAGGCGGAGCCCATCTCCTAAGCCCACCAAAGTGCACATTGGGA GACTCACCAGGAATGTGACAAAGGATCACATCATGGAGATATTTTCCACCTATGGGAAAATTAAAATGATTGACA AGAAGGCGCTGAAGCACATGGATGGAGGACAAATTGATGGCCAGGAGATCACTGCCACCGTCGTGCTGGCCCCCT GGCCTAGGCCAACCCCCAGGAGATTCAGCCCTCCCAGGAGAATGTTGCCACCACCGCCTATGTGGCTCAGGTCTC CCCCACGGATGAGGAGAAGGTCCCGCTCCCCGAGGCGCAGGTCCCCGTGCGCCGGAGATCACGGTCCCCGGGCC GCCGCCGCCACAGGAGCCGCTCCAGCTCCAACTCCTCCCAA<u>TAA</u>ACAGGCCACTGAAGCTCTCGCCCCTGTAACT TATACGCCACCCAGCTCAGTTTTGTCACTTTTCTAGCCAAAGCAAGACCAGTAGGAAAGCAAACCCTTGACTCTG GCAGGATTTGCAGGCAGCAGCAGCACCCCTCTGCCAGCCGGGCTCCGGCTGCAGAAGTGCTGTTGGCTTGGATG CTGTGTGCCTGTCAAGATTCCCTCCGGTTTTCTGGCTAGAAAGCTCACCCGTTTCCGGTTTTAAGAGTCAGTTCA GTGGCAGAGCCACCAGGGACAAGTGAGGCTCTTGGGGGTGGTTTGACCCTGCTTACCTGGGAGCACACTTTTCCC TTCCCCGATGACCTGGGATGGTGGCCAGGCCGTGCCCTTGCTGTTGCTGGGCAGTGTCTTTTTGGAAAGGGAGCT GCCCCAGGCTTTAGTGCAGCTGCCAACGCTGTTAGGCCTGGCCTCTCGAGGCCTCTTCTGACTTCAAGGGTCACA CACCCCACCGCTGTACTCTGAAATTGGCGAGTGAGTTGAGAGCCAGCTCTGCGGGGTCATCACGCAGCCATGGTT TTTTATTGTACAGTCAGTTCTATAAAATTTCTCTTTTGAGTTTTATACCTTTGTAGCATTTTAGATGACATTGTG TTTGTACTTTGTTGTAGAGTGGAAGAATTGTGTTGAATAAACCCAAGATCGGAATGC

PCT/US2003/028547

1525/6881 FIGURE 1411

PCT/US2003/028547

1526/6881 FIGURE 1412

PCT/US2003/028547

1527/6881 FIGURE 1413

ATAGAAGACTACTCGGAGAGCGCTGCCTCTGGGTTGGCGGGCTGGCAGGCTGTAGCCGAGCGCGGGCAGGACTCG TCCCGGCAGGGTTCCAGAGCCATGGGAGCGGAAAGGAGGCTGCTGTCGATTAAGGAGGCCTTTCGGCTGGCGCAG TTTCATGAGGAGTTCATTCATTACCTTAAATATGTTATGGTGGTCTATAAACGTGAACCAGCTGTGGAGAGGGTA ATAGAATTTGCAGCAAAGTTTGTTACCTCATTTCACCAATCAGATATGGAAGATGATGAGGAAGAAGATGGT GGCCTTTTAAATTATTTGTTTACTTTTCTCTTAAAGTCTCATGAAGCAAACAGCAATGCAGTGAGATTTAGAGTG TGCCTGCTCATAAACAAGCTTTTGGGAAGTATGCCAGAAAATGCTCAGATTGATGATGATGTTTTGATAAAATT AATAAAGCCATGCTTATTAGATTGAAAGATAAGATTCCAAATGTGAGAATACAGGCAGTTCTGGCGCTTTCACGA GAAGTTAGACGGGCAGTGTTATCATGTATTGCACCATCAGCAAAGACTTTGCCAAAAATTGTAGGGCGCACCAAG GATGTGAAAGAGGCTGTCAGAAAGCTGGCTTATCAGGTTTTAGCTGAAAAGGTTCATATGAGAGCTATGTCCATT GCTCAGAGAGTAATGCTCCTTCAACAAGGTCTTAATGACAGATCAGATGCTGTGAAACAAGCTATGCAGAAGCAT CTTCTTCAAGGCTGGTTACGGTTCTCTGAAGGAAATATCTTAGAGTTGCTCCATCGGTTGGATGTAGAAAATTCT TCTGAAGTGGCAGTCTCTGTTCTCAATGCCTTGTTTTCAATAACTCCTCTCAGTGAACTGGTGGGACTCTGTAAA AACAATGATGGCAGGAAATTGATTCCAGTGGAAACATTAACTCCTGAAATTGCTTTGTATTGGTGTGCCCTTTGT GAATATTTGAAATCAAAAGGAGATGAAGGTGAAGAATTTTTAGAGCAGATTTTGCCAGAGCCTGTAGTATATGCA GACTATTTATTGAGTTACATCCAGAGCATTCCAGTTGTTAATGAAGAACACAGAGGTGATTTTTCCTATATTGGA AATTTGATGACAAAAGAATTCATAGGTCAACAATTGATTCTAATTATTAAGTCTTTGGATACCAGTGAAGAAGGA GGAAGAAAAAACTGCTGGCTGTTTTACAGGAGATTCTTATTTTACCCACAATCCCAATATCCCTGGTTTCTTTT CTTGTTGAAAGACTACTCCACATCATTATAGATGATAATAAGAGAACACAAATTGTTACAGAAATTATCTCAGAG GAAATAAAAGTTAAGCTTATCGAAGCCAAAGAAGCTTTGGAAAATTGCATTACCTTACAGGATTTTAATCGGGCA TCAGAATTAAAAGAAGAAATAAAAGCATTAGAAGATGCCAGAATAAACCTTTTGAAAGAGACAGAGCAACTTGAA ATTAAAGAAGTCCACATAGAGAAGAATGATGCTGAAACATTGCAGAAATGTCTTATTTTATGCTATGAACTGTTG AAGCAGATGTCCATTTCAACAGGCTTAAGTGCAACCATGAATGGAATCATCGAATCTTTGATTCTTCCTGGAATA ATAAGTATTCATCCTGTTGTAAGAAACCTGGCTGTTTTATGCTTGGGATGCTGTGGACTACAGAATCAGGATTTT GCAAGGAAACACTTCGTATTACTATTGCAGGTTTTGCAAATTGATGATGTCACAATAAAAATAAGTGCTTTAAAG GGTACAGAAATAAACAGTGATGATGAGCAAGAATCAAAAGAAGTTGAAGAGACTGCTACAGCTAAGAATGTTCTG AAACTCCTTTCTGATTTCTTAGATAGTGAGGTATCTGAACTTAGGACTGGAGCTGCAGAAGGACTAGCCAAGCTG ATGTTCTCTGGGCTTTTGGTCAGCAGCAGGATTCTTTCTCGTCTTATTTTGTTATGGTACAATCCTGTGACTGAA GAGGATGTTCAACTTCGACATTGCCTAGGCGTGTTCTTCCCCGTGTTTGCTTATGCAAGCAGGACTAATCAGGAA TGCTTTGAAGAAGCTTTTCTTCCAACCCTGCAAACACTGGCCAATGCCCCTGCATCTTCTCCTTTAGCTGAAATT GATATCACAAATGTTGCTGAGTTACTTGTAGATTTGACAAGACCAAGTGGATTAAATCCTCAGGCCAAGACTTCC CAAGATTATCAGGCCTTAACAGTACATGACAATTTGGCTATGAAAATTTGCAATGAGATCTTAACAAGTCCGTGC TCGCCAGAAATTCGAGTCTATACAAAAGCCTTGAGTTCTTTAGAACTCAGTAGCCATCTTGCAAAAGATCTTCTG GTTCTATTGAATGAGATTCTGGAGCAAGTAAAAGATAGGACATGTCTGAGAGCTTTGGAGAAAATCAAGATTCAG TTAGAAAAAGGAAATAAAGAATTTGGTGACCAAGCTGAAGCAGCACAGGATGCCACCTTGACTACAACTACTTTC CAAAATGAAGATGAAAAGAATAAAGAAGTATATATGACTCCACTCAGGGGTGTAAAAGCAACCCAAGCATCAAAG TCTACTCAGCTAAAGACTAACAGAGGACAGAGAAAAGTGACAGTTTCAGCTAGGACGAACAGGAGGTGTCAGACT GCTGAAGCCGACTCTGAAAGTGATCATGAAGTTCCAGAACCAGAATCAGAAATGAAGATGAGACTACCAAGACGA GCCAAAACCGCAGCACTAGAAAAAAGTAAACTTAACCTTGCCCAATTTCTCAATGAAGATCTAAGTTAGGAAAGA CGATGGAGGTGGAATCCTTTAAGATTATGTCCAGTTATTTGCTTTAATAAAGAAGAAGTTACCCTTGTCAAAATC AG

PCT/US2003/028547

1528/6881 FIGURE 1414

PCT/US2003/028547

1529/6881 FIGURE 1415

 ${\tt MAAPLGGMFSGQPPGPPQAPPGLPGQASLLQAAPGAPRPSSSTLVDELESSFEACFASLVSQDYVNGTDQEEIRTGVDQCIQKFLDIARQTECFFLQKRLQLSVQKPEQVIKEDVSELRNELQRKDALVQKHLTKLRHWQQVLEDINVQHKKPADIPQGSLAYLGAGICQHPCTSEANVSKGQRQLAYEWADA$

PCT/US2003/028547

1530/6881 FIGURE 1416

CCTAGACGCACGTCCGCCCGGCCCCCGAGCCAGTCCGCCGCACGCCGTCTGCGCCCCGAAAGCCCCGCCC TGCTGCCTCTTCCGGCTGCGGGGCGAGTAGTCGTCCGACGTCTGGCCGTGAGACGTTTCGGGGAGCCGGAGTCTCT CCACCGCAGACATGACGAAGGCCTTGTTTTAGGAATCTATTCCAAAGAAAAAGAAGATGATGTGCCACAGTTCA TGAAGGCAGGGAAGACTCGAACCTTTTATGGTCTGCATCAGGACTTCCCCAGCGTGGTGCTAGTTGGCCTCGGCA AAAAGGCAGCTGGAATCGACGAACAGGAAAACTGGCATGAAGGCAAAGAAAACATCAGAGCTGCTGTTGCAGCGG GGTGCAGGCAGATTCAAGACCTGGAGCTCTCGTCTGTGGAGGTGGATCCCTGTGGAGACGCTCAGGCTGCTGCGG AGGGAGCGGTGCTTGGTCTCTATGAATACGATGACCTAAAGCAAAAAAAGAAGATGGCTGTGTCGGCAAAGCTCT ATGGAAGTGGGGATCAGGAGGCCTGGCAGAAAGGAGTCCTGTTTGCTTCTGGGCAGAACTTGGCACGCCAATTGA TGGAGACGCCAGCCAATGAGATGACGCCAACCAGATTTGCTGAAATTATTGAGAAGAATCTCAAAAGTGCTAGTA GTAAAACCGAGGTCCATATCAGACCCAAGTCTTGGATTGAGGAACAGGCAATGGGATCATTCCTCAGTGTGGCCA AAGGATCTGACGAGCCCCCAGTCTTCTTGGAAATTCACTACAAAGGCAGCCCCAATGCAAACGAACCACCCCTGG TGTTTGTTGGGAAAGGAATTACCTTTGACAGTGGTGGTATCTCCATCAAGGCTTCTGCAAATATGGACCTCATGA GGGCTGACATGGGAGGAGCTGCAACTATATGCTCAGCCATCGTGTCTGCTGCAAAGCTTAATTTGCCCATTAATA TTATAGGTCTGGCCCCTCTTTGTGAAAATATGCCCAGCGGCAAGGCCAACAAGCCGGGGGATGTTGTTAGAGCCA AAAACGGGAAGACCATCCAGGTTGATAACACTGATGCTGAGGGGAGGCTCATACTGGCTGATGCGCTCTGTTACG GTGCCACTGGGGTCTTTACCAATTCATCCTGGCTCTGGAACAAACTCTTCGAGGCCAGCATTGAAACAGGGGACC GTGTCTGGAGGATGCCTCTCTCGAACATTATACAAGACAGGTTGTAGATTGCCAGCTTGCTGATGTTAACAACA TIGGAAAATACAGATCTGCAGGAGCATGTACAGCTGCAGCATTCCTGAAAGAATTCGTAACTCATCCTAAGTGGG CACATTTAGACATAGCAGGCGTGATGACCAACAAAGATGAAGTTCCCTATCTACGGAAAGGCATGACTGGGAGGC CCACAAGGACTCTCATTGAGTTCTTACTTCGTTTCAGTCAAGACAATGCTTAGTTCAGATACTCAAAAATGTCTT CACTCTGTCTTAAATTGGACAGTTGAACTTAAAAGGTTTTTGAATAAATGGATGAAAATCTTTTAACGGAGACAA ATAAAGGTAAAGTTAATATCTTACTTGATAAGGATTTTTAAGATACTCTATAAATGATTAAAATTTTTTAGAACTT CCTAATCACTTTTCAGAGTATATGTTTTTCATTGAGAAGCAAAATTGTAACTCAGATTTGTGATGCTAGGAACAT GAGCAAACTGAAAATTACTATGCACTTGTCAGAAACAATAAATGCAACTTGTTGTG

PCT/US2003/028547

FIGURE 1417

ATTCGGAGCTGCGGGAGCCGGCTGGCAGGAGCAGGATGGCGGCGGCGGCGGCTGCAGGCGAGGCGCGCGGGTG CTGGTGTACGGCGGCAGGGGCGCTCTGGGTTCTCGATGCGTGCAGGCTTTTCGGGCCCGCAACTGGTGGGTTGCC AGCGTTGATGTGGTGGAGAATGAAGAGGCCAGCGCTAGCATCATTGTTAAAATGACAGACTCGTTCACTGAGCAG GCTGACCAGGTGACTGCTGAGGTTGGAAAGCTCTTGGGTGAAGAGAAGGTGGATGCAATTCTTTGCGTTGCTGGA GGATGGGCCGGGGGCAATGCCAAATCCAAGTCTCTCTTTAAGAACTGTGACCTGATGTGGAAGCAGAGCATATGG GCTGCCCTGGATGGGACTCCTGGTATGATCGGGTACGGCATGGCCAAGGGTGCTGTTCACCAGCTCTGCCAGAGC CTGGCTGGGAAGAACAGCGGCATGCCGCCCGGGGCAGCCGCCATCGCTGTGCTCCCGGTTACCCTGGATACCCCG ATGAACAGGAAATCAATGCCTGAGGCTGACTTCAGCTCCTGGACACCCTTAGAATTCCTAGTTGAAACTTTCCAT CTCACCCCAGCATATTTTTAGGCCTCATCTCAGTGCCTATGAGGGGCCTGCCAGAAAAGTCACTAACCTGTCTCA GTGTGGCCTTGTCCAGCCTTGTTTTTCTGTAACCCCTGTTTGTGGTACGAGATAATGAGTCCTATTTTTCTCTC ACATAATATGCATTTGCTCTCCTAGGACAGTGTAATACATTTATGTGAAGTAAAGACATGCGAGACTGGTGGCCT TGGATCGCTTTTGŢGACTGTTCATCTGTCCTTGACAGTGGCTGTCATCTTGACTACTTTGTTGATTTGTTGGTAT TGGGGACATTTTAAAGGCTGAGTTATTTTTGAATGTCATGTTTATGTCATAGACGTAGTTTTCGCATCCTTGAAT TAAACTGCCTTAACTCCTTTTGTGGTATAAGCAAAACTACATGGACTCTGTCCTGGTATCCTTTTCCTGTGTGGT TGCCCCGTGTCCTCTGGCCTAGGGTTAAGTGTGCAAGATAACTACTCGTGAGTATTCAGAATGTTGTTCCTAATA AATGCACTTGTTGTCTGTCTTTTAATCAAATCACATCTTATATACAGCAGTCAGAGATGAGTATACTAGAATC ATGGATTGCTGGAGGTCTTTTAATCTGATGTTCTCAGAAGGGGGTGGATTTAAATCCTGAAATAATATTTCAAC AC

PCT/US2003/028547

1532/6881 FIGURE 1418

ACAGTCCCTCCGGGTGGCGGGCGCCCCGAGCGTGGCAGCGCGCTAGGCGGCAGCAGCAGCGGGGCGGAGCGGGGCG TACGGCGGCAGGGGCGCTCTGGGTTCTCGATGCGTGCAGGCTTTTCGGGCTCGCAACTGGTGGGTTGCCAGCGTT GATGTGGTGGAGAATGAAGAGGCCAGCGCTAGCATCATTGTTAAAATGACAGACTCGTTCACTGAGCAGGCTGAC ${\tt CAGGTGACTGCTGAGGTTGGAAAGCTCTTGGGTGAAGAAGGTGGATGCAATTCTTTGCGTTGCTGGAGGATGG}$ GCCGGGGGCAATGCCAAATCCAAGTCTCTCTTTAAGAACTGTGACCTGATGTGGAAGCAGAGCATATGGACATCG CTGGATGGGACTCCTGGTATGATCGGGTACGGCATGGCCAAGGGTGCTGTTCACCAGCTCTGCCAGAGCCTGGCT ${\tt GGGAAGAACAGCGGCATGCCGGGGGCAGCCGCCATCGCTGTGCTCCCGGTTACCCTGGATACCCCGATGAAC}$ AGGAAATCAATGCCTGAGGCTGACTTCAGCTCCTGGACACCCTTAGAATTCCTAGTTGAAACTTTCCATGACTGG ATCACAGGGAAAAACCGACCGAGCTCAGGAAGCCTCATCTCAGTGCCTATGAGGGGCCTGCCAGAAAAGTCACTA ACCTGTCTCAGTGTGGCCTTGTCCAGCCTTGTGTTTTCTGTAACCCCTGTTTGTGGTACGAGATAATGAGTCCTA TTTTTCTCTCACATAATATGCATTTGCTCTCCTAGGACAGTGTAATACATTTATGTGAAGTAAAGACATGCGAGA CTGGTGGCCTGCAAATAGCATCCGTCAATCTGTGTTAACTGCATAGGGAGGCTCTGCATAGCACCTGCTATAGCG GTGTCATGTTGGATCGCTTTTGTGACTGTTCATCTGTCCTTGACAGTGGCTGTCATCTTGACTACTTTGTTGATT TGTTGGTATTGGGGACATTTTAAAGGCTGAGTTATTTTTGAATGTCATGTTTATGTCATAGACGTAGTTTTCGCA

PCT/US2003/028547

1533/6881 FIGURE 1419

GGCACGAGCGCAACCACAGCGCGCAGGGCAGGCGGGGCTGGCCTCTGAGCCCCGGCCTCGGACCGCCCACTCCA CTCCCGGCACGCCCGGTGCCGCCTTCCGGCTCCAGTCCCCGGGCTCGGCCTCGGCGAGGTGTAATTCGCAGCGCG GTTCGCCAGCCTCCCGCAGGTGGAGAGGGGCGTCTCCAAGATCATCGGCGGCGACCCTAAGGGCAACAATTTTCT GTACACCAATGGAAAGTGCGTCATCCTAAGGAACATCGACAACCCAGCCCTTGCTGACATCTACACAGAGCACGC CCATCAGGTGGTGGCCCAAGTATGCGCCCAGCGGATTCTACATTGCCTCCGGAGATGTGTCTGGGAAGCTGAG GATCTGGGATACCACGCAGAAGGAGCACCTGTTGAAGTATGAGTACCAGCCTTTCGCTGGGAAGATCAAAGACAT GGATAGTGGCTCTTCTGTGGGCGAGATTACAGGACACAACAAAGTCATCAACAGCGTGGACATCAAGCAGAGCCG GCCATACCGGCTGGCCACGGGAAGCGATGATAACTGCGCGGCATTCTTTGAGGGACCCCCATTCAAGTTCAAGTT CACAATTGGCGACCACAGCCGCTTTGTCAACTGTGTGCGATTCTCTCCTGATGGGAACAGATTTGCCACAGCCAG TGCTGACGGCCAGATATACATCTATGACGGGAAGACTGGGGGAGAAGGTGTGCGCGCTGGGCGGAAGCAAGGCCCA CGACGGTGGGATTTACGCAATTAGTTGGAGTCCCGACAGCACCCATTTGCTTTCTGCTTCTGGGGACAAAACTTC CAAGATTTGGGACGTCAGCGTGAACTCCGTGGTCAGCACATTTCCCATGGGCTCCACGGTTCTGGACCAGCAGCT GGGCTGCCTATGGCAGAAGGACCACCTGCTCAGTGTCTCCCTGTCCGGGTACATCAACTATCTGGACAGAAACAA CCCCAGCAAGCCCCTGCACGTCATCAAGGGTCACAGTAAATCGATCCAGTGTCTGACGGTGCATAAAAACGGCGG CTTCGCTGGGAAAGGCCACACGAACCAGGTGTCCAGGATGACCGTGGATGAGTCGGGGCAGCTCATCAGCTGCAG CATGGACGACACCGTGCGGTACACCAGCCTCATGCTGCGGGACTACAGCGGACAAGGAGTTGTGAAACTGGACGT TCAGCCAAAGTGCGTAGCCGTCGGCCCCGGGGGATACGCCGTGGTCGTGTGCATTGGACAGATTGTCCTGCTGAA GGATCAGAGGAAGTGCTTCAGCATCGACAACCCCGGCTACGAGCCCGAAGTTGTGGCAGTGCACCCCGGCGGGGA CACGGTGGCAATTGGGGGTGTGGACGGCAACGTCCGCCTGTATTCCATCCTGGGCACCACGCTGAAGGATGAGGG CAAGCTCCTAGAGGCCCAAGGGCCCCGTGACCGACGTGGCCTACTCCCACGACGCGCCCTTCCTCGCGGTGTGCGA CGCCAGCAAGGTGGTCACAGTGTTCAGCGTTGCTGACGGCTACTCGGAGAACAATGTTTTTTATGGACACCATGC AAAAATCGTCTGCCTGGCCTGGTCCCCAGACAATGAACACTTTGCCTCCGGTGGCATGGACATGATGGTGTATGT TTGGACCCTGAGTGACCCGGAAACCAGAGTCAAGATCCAAGATGCACACCGGCTGCACCATGTCAGCAGCCTGGC CTGGCTGGACGAGCACACGCTGGTCACGACCTCCCATGATGCCTCTGTCAAGGAGTGGACAATCACCTAC<u>TGA</u>GG AGCCCCACCCCGCCTCTGGATGGACCGAATCAGGCACTAGAGTTTAACTGCAGCGGAACATGTCATTTCTCTAT TTCTGTGACGCGCCCCATGCCCCCACCCACCACAAGAGGCAGGAGGGCCCAGTCATGACCCTCGTCTCTGCAG GGTGTCTGTACACGTTCTTCTGAAAGCTTTAGACAGTAACAGTTTGCACATGAAAAATAAAGCGAGCACCTAAAC AATGTGTGGAGCATAACTAAAACCCACAGCCCAACCAAACCTTGAGAATGCGAAACATTCCAGAGGCAGTAGCCT CCAAAGCACACAGAGCCCCTGGCCCGCCGCGGCTCTCACTATCTGTCAGGGGAGGTTGTACAGGTGAATGAGCC GGGGGGCTCATGTTCCTGCCTGCAGAACATTTCTGTACTAGTGAGAAGAGGGAATATGCATTGCAGTTCAGCAAA GCCGGAATTCTGTGTGAACAGATGTCTGTCTCCCTAGTGTGTGACTCACACCTTGTGGCTGCCTTCAGAGCGCC ACCTCCAGATCAGATGGGGACACACACCCCTGGATATGTTTCATTGTCAGATTTTGTGCTTGATTTTAAGAATG GAATTGTGGGTATCTTTCCTTTTTTTTTAATGTATCTTAACTGTTGCCTGTCAGTGTTTACAAACTAGTGCGTTG ACGGCACCGTGTCCAAGTTTTTAGAACCCTTGTTAGCCAGACCGAGGTGTCCTGGTCACCGTTTCACCATCATGC TTTGATGTTCCCCTGTCTTTCCCTCTTCTGCTCTCAAGAGCAAAGGTTAATTTAAGGACAAAGATGAAGTCACTG AAAA

PCT/US2003/028547

FIGURE 1420

MPYEIKKVFASLPQVERGVSKIIGGDPKGNNFLYTNGKCVILRNIDNPALADIYTEHAHQVVVAKYAPSGFYIAS GDVSGKLRIWDTTQKEHLLKYEYQPFAGKIKDIAWTEDSKRIAVVGEGREKFGAVFLWDSGSSVGEITGHNKVIN SVDIKQSRPYRLATGSDDNCAAFFEGPPFKFKFTIGDHSRFVNCVRFSPDGNRFATASADGQIYIYDGKTGEKVC ALGGSKAHDGGIYAISWSPDSTHLLSASGDKTSKIWDVSVNSVVSTFPMGSTVLDQQLGCLWQKDHLLSVSLSGY INYLDRNNPSKPLHVIKGHSKSIQCLTVHKNGGKSYIYSGSHDGHINYWDSETGENDSFAGKGHTNQVSRMTVDE SGQLISCSMDDTVRYTSLMLRDYSGQGVVKLDVQPKCVAVGPGGYAVVVCIGQIVLLKDQRKCFSIDNPGYEPEV VAVHPGGDTVAIGGVDGNVRLYSILGTTLKDEGKLLEAKGPVTDVAYSHDGAFLAVCDASKVVTVFSVADGYSEN NVFYGHHAKIVCLAWSPDNEHFASGGMDMMVYVWTLSDPETRVKIQDAHRLHHVSSLAWLDEHTLVTTSHDASVK EWTITY

PCT/US2003/028547

1535/6881 FIGURE 1421

GGCACGAGCGCAACCACAGCGCGCAGGGCAGGCGCGAGCTGGCCTCTGAGCCCCGGCCTCGGACCGCCCACTCCA CTCCCGGCACGCCCGGTGCCGCCTTCCGGCTCCAGTCCCCGGGCTCGGCCTCGGCGAGGTGTAATTCGCAGCGCG GTTCGCCAGCCTCCCGCAGGTGGAGAGGGGCGTCTCCAAGATCATCGGCGGCGACCCTAAGGGCAACAATTTTCT GTACACCAATGGAAAGTGCGTCATCCTAAGGAACATCGACAACCCAGCCCTTGCTGACATCTACACAGAGCACGC CCATCAGGTGGTGGCCAAGTATGCGCCCAGCGGATTCTACATTGCCTCCGGAGATGTGTCTGGGAAGCTGAG GATCTGGGATACCACGCAGAAGGAGCACCTGTTGAAGTATGAGTACCAGCCTTTCGCTGGGAAGATCAAAGACAT GGATAGTGGCTCTTCTGTGGGCGAGATTACAGGACACAACAAAGTCATCAACAGCGTGGACATCAAGCAGAGCCG GCCATACCGGCTGGCCACGGGAAGCGATGATAACTGCGCGGCATTCTTTGAGGGACCCCCATTCAAGTTCAAGTT CACAATTGGCGACCACAGCCGCTTTGTCAACTGTGTGCGATTCTCTCCTGATGGGAACAGATTTGCCACAGCCAG TGCTGACGGCCAGATATACATCTATGACGGGAAGACTGGGGGAGAAGGTGTGCGCGCTGGGCGGAAGCAAGGCCCA CGACGGTGGGATTTACGCAATTAGTTGGAGTCCCGACAGCACCCATTTGCTTTCTGCTTCTGGGGACAAAACTTC CAAGATTTGGGACGTCAGCGTGAACTCCGTGGTCAGCACATTTCCCATGGGCTCCACGGTTCTGGACCAGCAGCT GGGCTGCCTATGGCAGAAGGACCACCTGCTCAGTGTCTCCCTGTCCGGGTACATCAACTATCTGGACAGAAACAA CCCCAGCAAGCCCCTGCACGTCATCAAGGGTCACAGTAAATCGATCCAGTGTCTGACGGTGCATAAAAACGGCGG CTTCGCTGGGAAAGGCCACACGAACCAGGTGTCCAGGATGACCGTGGATGAGTCGGGGCAGCTCATCAGCTGCAG CATGGACGACACCGTGCGGTACACCAGCCTCATGCTGCGGGACTACAGCGGACAAGGAGTTGTGAAACTGGACGT TCAGCCAAAGTGCGTAGCCGTCGGCCCCGGGGGATACGCCGTGGTCGTGTGCATTGGACAGATTGTCCTGCTGAA GGATCAGAGGAAGTGCTTCAGCATCGACAACCCCGGCTACGAGCCCGAAGTTGTGGCAGTGCACCCCGGCGGGGA CACGGTGGCAATTGGGGGTGTGGACGGCAACGTCCGCCTGTATTCCATCCTGGGCACCACGCTGAAGGATGAGGG CAAGCTCCTAGAGGCCCAAGGGCCCCGTGACCGACGTGGCCTACTCCCACGACGCGCCCTTCCTCGCGGTGTGCGA CGCCAGCAAGGTGGTCACAGTGTTCAGCGTTGCTGACGGCTACTCGGAGAACAATGTTTTTTATGGACACCATGA AACATTCCAGAGGCAGTAGCCTCCAAAGCACAGAGCCCCTGGCCCGCCGCGGGCTCTCACTATCTGTCAGGGG GTGTTTACAAACTAGTGCGTTGACGGCACCGTGTCCAAGTTTTTAGAACCCTTGTTAGCCAGACCGAGGTGTCCT GGTCACCGTTTCACCATCATGCTTTGATGTTCCCCTGTCTTTCCCTCTTCTGCTCTCAAGAGCAAAGGTTAATTT AAAAGTAAGTATAAAGCACCGTGATTGGGAGTGTTTTTGCGTGTGTCGGAATCACTGGTAAATGTTGGCTGAGAA CAATCCCTCCCCTTGCACTTGTGAAAACACTTTGAGCGCTTTAAGAGATTAGCCTGAGAAATAATTAAATATCTT ТТСТСТТСААААААААААААААААА

PCT/US2003/028547

1536/6881 FIGURE 1422

MPYEIKKVFASLPQVERGVSKIIGGDPKGNNFLYTNGKCVILRNIDNPALADIYTEHAHQVVVAKYAPSGFYIAS GDVSGKLRIWDTTQKEHLLKYEYQPFAGKIKDIAWTEDSKRIAVVGEGREKFGAVFLWDSGSSVGEITGHNKVIN SVDIKQSRPYRLATGSDDNCAAFFEGPPFKFKFTIGDHSRFVNCVRFSPDGNRFATASADGQIYIYDGKTGEKVC ALGGSKAHDGGIYAISWSPDSTHLLSASGDKTSKIWDVSVNSVVSTFPMGSTVLDQQLGCLWQKDHLLSVSLSGY INYLDRNNPSKPLHVIKGHSKSIQCLTVHKNGGKSYIYSGSHDGHINYWDSETGENDSFAGKGHTNQVSRMTVDE SGQLISCSMDDTVRYTSLMLRDYSGQGVVKLDVQPKCVAVGPGGYAVVVCIGQIVLLKDQRKCFSIDNPGYEPEV VAVHPGGDTVAIGGVDGNVRLYSILGTTLKDEGKLLEAKGPVTDVAYSHDGAFLAVCDASKVVTVFSVADGYSEN NVFYGHHEK

WO 2004/030615 PCT/US2003/028547

1537/6881 FIGURE 1423

ATTTTAGCTGTTGGTTCCGGCCGCACCGTGTGGGCTGTAGTAGCGGGAGGGGTGGGGGTCCTCCAGAGTTAAGTG GCTGTCCTCGACTGTGCCCATACAGCAGCCAGCTTTCTTCCTTAATAACTGCCCGTTCGAAGAGTGCGAGGATGT CCAAGCGGCACCGGTTGGACCTAGGGGAGGATTACCCCTCTGGCAAGAAGCGTGCGGGGACCGATGGGAAGGATC GAGATCGAGACCGGGATCGTGAAGATCGGTCTAAAGATCGAGACCGAGAACGTGATAGAGGAGATAGAGAGCGAG AGAGGGAGAAAGAAAAGGAGAAGGAGTTGCGAGCTTCAACAAATGCTATGCTTATCAGTGCTGGATTACCACCTT TGAAAGCTTCCCATTCAGCTCACTCAACCCACTCAGCACATTCAACGCATTCAACACATTCTGCTCATTCAACGC ATGCCGGACATGCAGGTCACACGTCACTTCCACAGTGCATTAATCCGTTCACCAACTTACCCCATACTCCTCGAT ACTATGATATTCTAAAGAAACGTCTTCAGCTCCCTGTTTGGGAATACAAGGATAGGTTTACAGATATTCTGGTTA GACATCAGTCCTTTGTACTGGTTGGTGAGACTGGGTCTGGTAAAACAACACAGATTCCACAGTGGTGTGGAGT ACATGCGATCATTACCAGGACCCAAGAGAGGGGGTTGCCTGTACCCAACCCAGGAGAGTGGCTGCAATGAGTGTGG CTCAGAGAGTTGCTGATGAGATGGATGTTGGTTGGGCCAGGAAGTTGGTTACTCCATTCGATTTGAAGACTGCA AGCGTTATGGTGTAATAATTCTTGATGAGGGCTCATGAGAGGACACTGGCTACAGATATTCTAATGGGTGTTCTGA AGGAAGTTGTAAGACAGAGATCAGATTTAAAGGTTATAGTTATGAGCGCTACTCTAGATGCAGGAAAATTCCAGA TTTACTTTGATAACTGTCCTCCTAACTATTCCTGGGCGTACACATCCTGTTGAGATCTTCTATACTCCAGAAC CAGAGAGAGATTATCTTGAAGCAGCAATTCGAACAGTTATCCAGATTCATATGTGTGAAGAGGAAGAGGGAGATC TTCTTCTTTAACTGGTCAAGAGGAAATTGATGAAGCCTGTAAGAGAATAAAGCGTGAAGTTGATGATTTGG GCCCTGAAGTTGGTGACATTAAAATCATTCCATTGTATTCTACACTTCCACCTCAGCAGCAGCAACGCATTTTTG AGCCTCCACCTCCCAAAAAACAGAATGGAGCAATTGGAAGAAAGGTAGTTGTCAACTAACATAGCAGAGACGT CTTTGACAATAGATGGTGTGTTTTGTGATTGATCCTGGATTTGCGAAACAGAAGGTCTACAATCCTCGAATCA GAGTTGAGTCCCTTTTGGTGACAGCTATTAGTAAAGCTTCAGCTCAGCAAAGGGCTGGTCGAGCTGGACGTACCA GACCTGGAAAATGCTTCAGACTTTACACAGAGAAAGCTTATAAAACAGAAATGCAGGATAACACCTATCCTGAGA TTTTGCGTTCTAATTTAGGATCAGTTGTGTTACAATTGAAGAAACTTGGTATTGATGACTTGGTACATTTTGATT TTATGGATCCACCAGCTCCTGAAACTCTGATGAGAGCCCTGGAACTTTTGAATTACCTGGCTGCTTTAAATGATG ATGGAGATCTGACTGAATTGGGATCCATGATGGCAGAGTTTCCTCTAGATCCACAGCTCGCAAAAATGGTTATTG GCCCCACGGAGGCCAAGAAAGCCGCAGATGAGGCCAAGATGAGATTTGCCCACATAGATGGAGATCATCTGACAC TGCTGAACGTCTACCATGCTTTTAAACAAAATCATGAATCGGTTCAGTGGTGTTATGACAACTTCATTAACTACA GGTCCCTGATGTCCGCAGACAATGTACGCCAGCAGCTATCTCGAATTATGGACAGATTTAATTTGCCTCGTCGAA GTACTGACTTTACAAGCAGGGACTATTATATTAATATAAGAAAAGCTTTGGTTACTGGGTATTTTATGCAGGTGG CACATTTAGAACGAACAGGGCATTACTTAACTGTGAAAGATAACCAGGTGGTTCAGTTGCATCCCTCTACTGTTC TTGACCACAAACCTGAATGGGTGCTTTATAATGAGTTTGTTCTAACAACAAAGAATTACATCCGGACATGTACAG ATATCAAGCCAGAATGGTTGGTGAAAATTGCCCCTCAATATTATGACATGAGCAATTTCCCACAGTGTGAAGCAA AGAGACAGTTGGACCGCATCATTGCCAAACTTCAATCCAAGGAATATTCACAGTACTGAATTCAGTGCTTAGAAC TGAAGTTATTGAGAGGACAGCTTTAAAAGATGAATGAACTCAAAAGTTCGAGTTGTGCTCTTCACGTTGGTTCGA TAATGGCCTTTATTTGAAAGCTTTTTAATTTTTCTTTACAGTAAATATTCCATTCTGATTTCATAAATTAAACAT TTATGCCTCCCTTTTGTGTTGACACTGTAGCTCATACTGGAAAAGTCGATCAATGTTTTGCAGTTTATTGAAAGT AGTTCTATATATAACAATGTTATAAGCATTTCTTTAGAAATGGTTGAAAATGCTTCTAAAATGTGATTATCGACC ATGGTATGCATGATCGTTGTAATTGTTGACATTCCTTTTAGAAGTTGTGAAATGTTACAACTTGTGCTTATGTAG ACACAATCTTCTGTCTCAGTACAGAGGCACTGACTTCAATAAAGTCTATTTATACT

WO 2004/030615 PCT/US2003/028547

1538/6881 FIGURE 1424A

AGGATTTTAAGAGTGGACTTGGTATTACCATAATTCCTATGAATGTAGCAAATGTAAAGCAAGTGGACCGAACTG TGAAACAATCTTTTGAAATAATCACTCCCTACAGGAGTTTCAGCTTTACAGCCGAGACTGAAAAAGGAGAAACAAG TCTGTAAGAAGTGTGCAGGACAGCATAGATCTTTAGGACCAAAAGATTCCAAGGTTAGAAGTCTAAAAAATGGATG CTAGCATTTGGAGCAATGAACTCATCGAGCTTTTTATTGTCATTGGAAACAAAAGAGCAAATGACTTTTGGGCTG GTAATCTTCAAAAGGATGAAGAATTACATATGGACTCACCAGTAGAAAAGAGAAAAAACTTTATTACTCAGAAAT ATAAAGAAGGAAAATTCAGAAAAACTCTTTTGGCATCTCTCACCAAAGAAGAATTAAATAAGGCTCTATGTGCTG CTGTAGTGAAACCGGATGTTCTAGAAACAATGGCTTTGCTGTTCAGTGGAGCAGATGTCATGTGTGCCACCGGAG ACCCCGTGCATAGCACCCCCTATCTGCTAGCCAAGAAGCTGGGCAAAGTCTGCAAATGGAATTTCTCTACCATA ACAAATTCTCAGATTTCCCTCAACATGATATTCATTCCGAGGGTGTATTAAGTCAAGAGTCTTCCCAGTCCACAT TCCTCTGTGACTTTTTATATCAAGCTCCTTCTGCTGCTTCTAAACTCTCTTCAGAGAAAAAACTGCTTGAAGAGA CAAATAAAAAATGGTGTTTTTGGAAGGAGGCTTCTTGAGTTACTATGAAAATGATAAGTCTACCACACCTAATG GCACCATTAATATCAATGAAGTTATCTGCCTGGCTATACACAAAGAGGACTTCTATTTAAATACTGGGCCCATCT TTATCTTTGAGATCTACTTACCCTCCGAACGTGTGTTTTTATTTGGAGCTGAAACATCTCAAGCTCAAAGAAAAT GGACAGAGGCAATAGCCAAGCATTTTGTTCCCTTATTTGCTGAAAACTTAACAGAAGCTGACTATGATTTGATTG GTCAACTCTTCTACAAAGACTGCCATGCCCTGGATCAGTGGAGAAAAGGCTGGTTTGCTATGGACAAATCCAGCT TGCATTTTTGCCTTCAAATGCAAGAAGTTCAGGGAGATAGAATGCACTTAAGAAGACTGCAAGAGCTAACAATCA GCACAATGGTTCAAAATGGGGAAAAACTGGATGTTTTACTCTTGGTAGAAAAAGGGAGAACATTATACATCCATG GGCATACCAAGTTGGATTTCACAGTCTGGCATACTGCAATTGAAAAAGCAGCAGGTACAGATGGTAATGCTTTAC . AAGATCAGCAGCTCAGCAAAAATGACGTTCCCATTATAGTGAACAGCTGTATAGCATTTGTTACACAGTATGGTT TAGGATGCAAATATATCTATCAAAAGAATGGTGATCCTTTGCATATAAGTGAACTCCTGGAGAGTTTCAAAAAGG ATGCAAGAAGCTTTAAATTGAGGGCTGGAAAACATCAGCTTGAAGATGTGACGGCTGTGTTGAAAAAGTTTTCTCT CTGACATTGATGATGCACTGCTTACTAAGGAGCTCTACCCATATTGGATCTCTGCTTTAGATACGCAAGATGACA AGGAAAGAATTAAAAAATATGGAGCATTTATACGTTCTCTTCCAGGGGTCAACCGAGCAACACTAGCAGCTATCA TAGAAATATTTGAGGTTAAAGAAGATCAAGTCAAACAAATGGACATAGAAAATAGCTTTATTACCAAGTGGAAAG TAATTCGGATATCTCCTGTGATGGAAGCAGAAGAATTAACTAATGATATTAGCGATAAAAAAATATTATTCCTA CAAAAGGTGATATTTGGGCCACATTTGAAGTCATTGAAAATGAAGAGCTAGAGCGTCCTCTTCACTACAAGGAAA ATGTACTGGAGCAGGTGCTTCGGTGGAGTTCATTAGCTGAACCTGGCTCTGCTTACCTGGTGGTGAAGAGATTCT TAACCGCTGACACAATTAAACACTGCAGTGACCGGAGTACACTGGGAAGCATCAAAGAAGGAATCTTGAAAATCA AAGAAGAACCATCCAAAATACTATCTGGAAATAAGTTTCAAGACCGGTATTTTGTTTTACGAGATGGGTTTCTCT TTCTTTACAAGGATGTGAAGAGTAGTAAACATGACAAGATGTTTTCTCTCAGTTCCATGAAGTTTTATCGTGGAG TGAAAAAGAAAATGAAGCCTCCAACAAGCTGGGGATTGACCGCATATTCTGAGAAACATCACTGGCACCTGTGTT GTGATAGTTCACGAACTCAGACGGAGTGGATGACCAGTATCTTTATTGCCCAGCATGAATATGATATATGGCCAC CAGCTGGAAAGGAACGAAAACGTTCAATAACCAAAAATCCCAAAATTGGAGGTTTGCCTCTGATTCCTATACAGC ATGAGGGGAATGCAACCTTGGCCCGGAAAAATATTGAGAGTGCAAGAGCAGAACTTGAAAGGCTGCGGCTCAGTG AAAAGTGTGATAAAGAGTCCGTGGACTCTAGCTTAAAGGAGAGAGCTTCCATGGTGGCCCACTGCCTGGAGCACA AGGACGATAAACTTCGAAATCGACCCCGAAAACATCGGAGTTTCAACTGCCTGGAGGACACAGAGCCTGAAGCCC CACTTGGGCAACCAAAAGGCCATAAAGGCCTAAAGACATTGAGGAAGACTGAGGACAGGAATAGCAAAGCTACTT TGGACTCTGATCATAAGTTACCATCAAGGGTAATTGAAGAACTTAATGTGGTTCTACAACGGTCAAGAACCCTTC CAAAAGAATTACAGGATGAGCAGATTTTGAAGTAGGAAATAAAATGAATTGCTCCCCAGATTATTTTTTAATAT TGTATGCAATCTTTATGTGTAACTCCAAAACTGAACTATAAGATAATTCATAAGAATTTGCCTATTGATAGGCAA ATTTGTCTATGCTTAGGCATTTAAGGAGCATTTAAAAATATGTATATATGTGACTGAATGTAAGATTAACTTTAT TTTGGTCTGAACAACCTTGTAAAGTTCCATTGTATTAACGTGTGTAAGAAGACATTGGGTTACTTAGGTGGTCA GTCCTTTTAAAGTAGTTGTCTGTTAAGTGGTATAATTTATGAGCAGAAATCTCAAACTGTACTGTATTGTATAAA

PCT/US2003/028547

1539/6881 FIGURE 1424B

ATGCTGTGTTTAAATGAAGCCTAAGAAACTATCTGTAACATATTTTGCACTTTGAGAAACCTTGTATATTAAATT TTTATTGTAGTGGCTGCCTAAAAACCACTGGAGTTTTTAAAAGAAGCAAGGAGTTAAATGTCCTGCAAAACAAGG AAGTGAGCTAAGATTCATTCTAGTTCACTAATGACCAGAACTTGTCAATGAGAAACCACTTGTTAAGAAAAAGTC CAGTGTTTATTTCTCAAGAGTAATATTCGGCCAACAGATGTAAATAATAGCACTAGCCACTCTTATTAATATTTA TAGTGTTAGAAAACCAGCCACATTACAGATTCACTACGTTTGAGCTCATTGTTGGTGGCTGCTAAGAGGAAACTT ACACTGCATTGGAGAGGTTGTGTACACAGGACCTGGCCTGGATGCTGATTGCACTGTCATTGTATGCAAGCATTT TGTCTTTTTTCAGAATTTCTGACTATACTTTTGGTACGAACAAAATTCATCACCACAGGGTCCTGTTGTTTTGTT TGATTTTTAGATTTTTTAAATTATTATTAAGGTTGTAATGTTTTTCTCCGAGTTGTCAGAAATAACTGGAAGAA TACAATATATGGCCATTATGGAGCCAGGGGCTAGTTGGTGGTTTACTATACATTTGGGGGCTACCTGGTCACATT TAATCTAGGTTTTTTTTTTTTTTTTTAAGTAAAGGTGTGGTCTCTTCCCTGTACTTATGAATAAGGACAAAGCCC CATGTTAGGGGAAGCATTTTTCCATCAGTTTCTTTAAAATTGGATTGTCTGGTGAGTTTTGATATTAAACATTAT CCAATCATAGTACAGTGATGTGGTGGTAGATGCTATGAATTTCTTCATTGTAAAATACGGATCATTTGTATTTTG ACAAAACTGCAGGACAGTTTATGAAATAGGTGGCACTATTAGGGAATCTTCCTTTAAAGCAAGAAATCATGTTAT GAAATTAATATTTGGTGATGTTGGACAGTGGAAAAGTATCTAGAGTTTTTACCTGCCTTATCTGAATTCTTCTTG AAACTTGAGCTTAAACTCTAATAGCTGTTTCCCTTTCTATTCTGAACAACTGTCTCCATTTTTCAAGTGTGAGAG ATAAGGGCTAATGATGACATCTCATTTATTTTGAGTAAACATTAAAATTGTTTTACAAGTCTACTTG

PCT/US2003/028547

1540/6881 FIGURE 1425

TTCTTTCTTTGCTGCGTCTACTGCGAGAATGAAGACTATTCTCAGCAATCAGACTGTCGACATTCCAGAAAATGT
CGACATTACTCTGAAGGGACGCACAGTTATCGTGAAGGGCCCCAGAGGAACCCTGCGGAGGGACTTCAATCACAT
CAATGTAGAACTCAGCCTTCTTGGAAAGAAAAAAAAGAGGCTCCGGGTTGACAAATGGTGGGGTAACAGAAAGGA
ACTGGCTACCGTTCGGACTATTTGTAGTCATGTACAGAACATGATCAAGGGTGTTACACTGGGCTTCCGTTACAA
GATGAGGTCTGTGTATGCTCACTTCCCCATCAACGTTGTTATCCAGGAGAATGGGTCTCTTGTTGAAATCCGAAA
TTTCTTGGGTGAAAAAATACATCCGCAGGGTTCGGATGAGACCAGGTGTTGCTTGTTCAGTATCTCAAGCCCAGAA
AGATGAATTAATCCTTGAAGGAAATGACATTGAGCTTGTTTCAAATTCAGCGGCTTTGATTCAGCAAGCCACAAC
AGTTAAAAACAAGGATATCAGGAAATTTTTGGATGGTATCTATGTCTCTGAAAAAAGGAACTGTTCAGCAGGCTGA
TGAATAAGATCTAAGAGTTACCTGGCTACAGAAAGAAGATGCCAGATGACACTTAAGACCTACTTGTGATATTTA
AATGATGCAATAAAAGACCTATTGATTTGGACCTTCTTCTT

PCT/US2003/028547

1541/6881 FIGURE 1426

MKTILSNQTVDIPENVDITLKGRTVIVKGPRGTLRRDFNHINVELSLLGKKKKRLRVDKWWGNRKELATVRTICS HVQNMIKGVTLGFRYKMRSVYAHFPINVVIQENGSLVEIRNFLGEKYIRRVRMRPGVACSVSQAQKDELILEGND IELVSNSAALIQQATTVKNKDIRKFLDGIYVSEKGTVQQADE

PCT/US2003/028547

1542/6881 FIGURE 1427A

GTCCTTGCTTCTTTTTCATTGATGTAAATTTTTTTAACTTAATATGAAAACTCTCCAAGTCTTGATCATCAGCC AGGATTTTGCCACAGCAATTTCATTCTCTTATCGGAGCTTGTATGTGTCAAAGTATACTTCAGAGTGCAAACATT AAGCAAGTAATATTTTACCTACAGATACTTATGAAGACATTCTTTCGCTATCGTGAGTAAAAGTATATAAAGC TGTTTCTAACTGAAAATGCTTGAAATAAGCCTGTAATAGAAATATTTTTTCATTTTTTAAAAAAAGGGCGGAATTC CCAGACTGTCTTCGCCTTCTTGCACTTCGCGGGAGAAGTTGTTGGCGCGAATGGATCCTGAGCCTCGATAACAGA $\tt TTCCTCAACCGGCCCACCCGCCAGCCAGCCAGCCGCCTTCATCCTGGGGGCTGCG\underline{\textbf{ATC}} \texttt{GACATTCGGAAATTCTTTG}$ GAGTAATACCAAGTGGAAAGAAACTTGTAAGTGAAACAGTAAAGAAGAATGAGAAAACAAAGTCTGATGAAGAAA AACCAAGCAAGAAAAAGAGGATCATCTATGATTCAGATTCAGAGTCAGAGGAGACGTTGCAGGTAAAAAATGCCA CAGAAACAGATGAAGAAGATGACTTTATGTGTAAGAAGGCGGCCTCTAAATCAAAAGAGAATGGAAGATCTACAA ATAGTCATCTTGGAACATCAAACATGAAAAAGAATGAAGAAAACACTAAGACCAAGAATAAGCCTTTATCACCAA TAAAACTTACACCCACATCAGTACTTGATTATTTTGGAACTGGAAGTGTCCAAAGATCTAATAAGAAGATGGTGG CAAGCAAAAGAAAAGAGCTTTCACAAAATACAGATGAGTCTGGATTAAATGATGAAGCCATCGCCAAGCAATTAC AGCTTGATGAAGATGCGGAGCTGGAGAGGCAGTTGCATGAAGATGAAGAGTTTGCCAGAACATTAGCCATGTTGG ATGAAGAACCCAAGACCAAAAAGGCTCGAAAGGACACAGAAGCGGGAGAAACGTTTTCATCTGTCCAAGCCAATT GTCCTAGGAAGCAAAGTAAATATGAAAGTTCAAAAGAATCTCAGCAACATTCCAAGTCATCAGCTGACAAAATAG GAGAAGTCTCTCCCCAAGGCCAGTTCTAAGCTGGCAATTATGAAAAGAAAAGAAGAGAGCTCTTATAAAGAAA TAGAGCCTGTGGCCTCAAAAAGAAAAGAAAATGCCATTAAATTGAAAGGAGAGACAAAAACTCCTAAGAAAACCA AAAGTTCTCCAGCTAAAAAAGAGTCTGTAAGTCCTGAAGATTCTGAAAAGAAACGCACTAATTATCAAGCTTATC GAAGCTACTTAAATCGAGAAGGTCCCAAGGCTCTGGGCTCCAAAGAAATACCAAAGGGAGCTGAAAATTGCTTGG AAGGCCTTATATTTGTAATCACAGGCGTGCTGGAGTCTATTGAACGAGATGAGGCCAAGTCTCTAATTGAACGTT ATGGGGGAAAAGTAACAGGAAATGTCAGCAAGAAAACAAATTATCTTGTCATGGGTCGTGATAGTGGACAGTCCA AGAGTGATAAGGCCGCAGCCTTGGGGACAAAATTATTGATGAAGATGGCCTGTTGAATCTGATTCGGACTATGC CCAAAAGGGACAGTTTGGCAAAGACAATAAAAAAGGAAACAGATGTGTTTTGGAAAAAGCCTGGATTTCAAGGAGC AGGTGGCTGAGGAGACAAGTGGTGACAGCAAGGCTAGGAATTTGGCTGATGACAGCAGTGAAAACAAAGTGGAAA ATTTGCTCTGGGTGGATAAATATAAGCCAACCTCGCTCAAGACCATAATTGGACAGCAAGGTGACCAGAGCTGTG CCAACAAACTCCTACGCTGGCTCCGAAACTGGCAAAAGAGTTCTTCCGAAGATAAAAAACACGCAGCAAAGTTTG GTAAATTTTCCGGCAAAGATGATGGCTCTAGTTTTAAAGCAGCGTTGCTGTCAGGCCCTCCTGGTGTTGGCAAAA CCACCACAGCTTCCCTGGTGTGTCAGGAGTTGGGATACAGCTACGTGGAACTGAATGCAAGTGACACCCGGAGTA AGAGCAGTTTGAAGGCGATTGTTGCTGAGTCACTGAACAATACCAGCATCAAAGGCTTTTATTCAAATGGAGCAG GAATTCAGGAATTAATTGGCCTGATAAAACATACTAAAATTCCCATTATTTGTATGTGCAATGATAGAAATCATC CCAAGATTCGCTCTCTGGTTCATTATTGTTTTGATCTTCGTTTTCAAAGACCTCGGGTTGAACAGATTAAGGGTG ATCAAGATATCAGACAGGTTTTACATAATCTGAGTATGTGGTGTGCACGAAGTAAAGCATTAACCTATGACCAGG CCAAAGCTGATTCTCACAGAGCCAAAAAGGATATCAAAATGGGCCCATTTGATGTTGCCCGGAAAGTGTTTGCAG CTGGAGAGGAGACTGCTCACATGTCACTTGTGGACAAGTCAGATCTCTTTTTTCATGATTATTCAATAGCACCCC TCTTCGTCCAGGAAAATTACATACACGTGAAGCCTGTAGCAGCAGGGGGTGACATGAAAAAGCACCTGATGCTTT TAAGCAGAGCAGCAGACAGCATATGCGATGGTGACCTAGTGGACAGCCAGATCCGGAGTAAGCAAAACTGGAGTC TTCTGCCTGCGCAGGCCATTTATGCCAGTGTTCTTCCTGGAGAGTTGATGAGGGGGGTACATGACCCAGTTTCCCA CCTTCCCAAGCTGGCTGGGGAAGCACTCGTCTACAGGCAAACATGATCGTATTGTTCAGGACCTGGCCTTGCATA TGAGTCTCAGAACTTACTCCAGCAAAAGGACTGTAAACATGGATTATCTGTCGCTTCTAAGGGATGCACTTGTAC AGCCCTTGACCTCACAAGGAGTAGACGGAGTACAGGATGTTGTTGCACTTATGGACACATATTATTTGATGAAAG AAGACTTTGAGAATATCATGGAAATCAGCAGCTGGGGTGGCAAACCTAGTCCCTTTTCAAAGCTGGATCCCAAGG

PCT/US2003/028547

1543/6881 FIGURE 1427B

TGAAAGCAGCCTTCACAAGAGCTTACAATAAGGAAGCCCACCTTACTCCATACTCACTTCAAGCTATAAAGGCAT CTAGACACAGCACAAGCCCATCCCTGGATTCGGAATACAATGAAGAATTAAATGAAGATGACTCTCAATCTGATG AGAAAGACCAAGATGCTATAGAAACTGATGCCATGATCAAGAAAAAGACAAAATCTTCAAAGCCTTCAAAACCAG AAAAAGATAAGGAGCCCAGAAAAGGAAAAGGAAAAAGTTCGAAGAAA<u>T**GA**</u>AACCATTTTTCACTAGCGACAGCCA CTTTTTACTCTCCCTCCTGACCAGTCCAGCTGGTCTAGAGAAAGCCTTGTTTTTTCCCAGAGCAACCATGTTTTA GCATAATGGGATGACCTGGTGTCCCATTATAAATAAAGGGTGGTATGGCTAGAAGGGTATGAGCAGTAGGCTTAT GTACACCTCTTATAGAGGTTGATAGGACTGCTTGGGTCCTCCACTGTCCTCTGTCAATCTAGTTAGACGTGCTTC TGAATGACTGTAGAATTGGAACTAGAAACTACACCTGGGCTTTGGAGTCAGATTTTAGTTAACAATAATGAGCCT GGAGCAGTAGTACTAAGGCGTCTTTTGTAGGCTTAAGAATTTATCCTAATGGCCTTTATAGGACCAATGCTGATT CTGGGTATTCTTTGTACATTGTCAGATATCTTTCAAAGTATAAATTAGGAATAAAAATGTTCCACATGATATGTG TACAAATTCTTTTTAAGATTGTCATCTTGTACAGCAAAATATTATGTTGGTATATTACTTCCTTATTAATTTGCA AATGATTGGATTAAAAAAGCTCACTGTATTCCTTACTAACCTGTTGTGTGAAACATAACATTGGCAGTCGAGGAG GTGGTCTGTTATGGGGCTTTGCAGCGTGGGGGGCTGCAGAAGATTCTCAGACATTCTTATCCTTCTGGAGTCTCA ACCCATCAGGTTCAGACCAGTAGGAACCAGGCTGGGTCAGGCTCTTAATTTCACTACGGTGGGGGACAAAATGAA CACTGGCTTTTGTTCACTTTGCCCCTGAGAGATCTAGTCCTGTCCTGTGATGGCTTCCACAAACCCTGTTGGAAG TTTGGGTTATTCCTATAACTGTATGTGTTGAGTGGCCGTGACGTATGGACCTAGCCTGGAATTTAGATGTCTAGC ATAAGGATCGTATTCCCTGCTTTAAGGAACTGGTAGTCTTGTTTGGGTGATGAGACAAAGTTCTTGAGACATTTA AACTGTATTTACCAGTGTGAAAAATGTCATTTATGGAGATTAATTCATTATGGAAATAAAACATTGCCTAAGCCC TTGCCTGCTG

PCT/US2003/028547

FIGURE 1428

MDIRKFFGVIPSGKKLVSETVKKNEKTKSDEETLKAKKGIKEIKVNSSRKEDDFKQKQPSKKKRIIYDSDSESEE TLQVKNAKKPPEKLPVSSKPGKISRQDPVTYISETDEEDDFMCKKAASKSKENGRSTNSHLGTSNMKKNEENTKT KNKPLSPIKLTPTSVLDYFGTGSVQRSNKKMVASKRKELSQNTDESGLNDEAIAKQLQLDEDAELERQLHEDEEF ARTLAMLDEEPKTKKARKDTEAGETFSSVQANLSKAEKHKYPHKVKTAQVSDERKSYSPRKQSKYESSKESQQHS KSSADKIGEVSSPKASSKLAIMKRKEESSYKEIEPVASKRKENAIKLKGETKTPKKTKSSPAKKESVSPEDSEKK RTNYQAYRSYLNREGPKALGSKEIPKGAENCLEGLIFVITGVLESIERDEAKSLIERYGGKVTGNVSKKTNYLVM GRDSGQSKSDKAAALGTKIIDEDGLLNLIRTMPGKKSKYEIAVETEMKKESKLERTPQKNVQGKRKISPSKKESE SKKSRPTSKRDSLAKTIKKETDVFWKSLDFKEQVAEETSGDSKARNLADDSSENKVENLLWVDKYKPTSLKTIIG QQGDQSCANKLLRWLRNWQKSSSEDKKHAAKFGKFSGKDDGSSFKAALLSGPPGVGKTTTASLVCQELGYSYVEL NASDTRSKSSLKAIVAESLNNTSIKGFYSNGAASSVSTKHALIMDEVDGMAGNEDRGGIQELIGLIKHTKIPIIC MCNDRNHPKIRSLVHYCFDLRFQRPRVEQIKGAMMSIAFKEGLKIPPPAMNEIILGANQDIRQVLHNLSMWCARS ${\tt KALTYDQAKADSHRAKKDIKMGPFDVARKVFAAGEETAHMSLVDKSDLFFHDYSIAPLFVQENYIHVKPVAAGGD}$ $\tt MKKHLMLLSRAADSICDGDLVDSQIRSKQNWSLLPAQAIYASVLPGELMRGYMTQFPTFPSWLGKHSSTGKHDRI$ VQDLALHMSLRTYSSKRTVNMDYLSLLRDALVQPLTSQGVDGVQDVVALMDTYYLMKEDFENIMEISSWGGKPSP FSKLDPKVKAAFTRAYNKEAHLTPYSLQAIKASRHSTSPSLDSEYNEELNEDDSQSDEKDQDAIETDAMIKKKTK SSKPSKPEKDKEPRKGKGKSSKK

PCT/US2003/028547

1545/6881 FIGURE 1429A

ATAGTTCGCGTAGCGGCTCGAGCGTGGAGATGAAGCGTATTTTCTCACTGCTAGAAAAGACTTGGCTTGGCGCAC CAATACAGTTTGCCTGGCAAAAAACATCAGGAAACTACCTTGCAGTAACAGGAGCTGATTATATTGTGAAAATCT TTGATCGCCATGGTCAAAAAAGAAGTGAAATTAACTTACCTGGTAACTGTGTTGCCATGGATTGGGATAAAGATG GAGATGTCCTAGCAGTGATTGCTGAGAAATCTAGCTGCATTTATCTTTGGGATGCCAACACAAATAAGACCAGCC AGTTAGACAATGGCATGAGGGATCAAATGTCTTTCCTTCTTTGGTCAAAAGTTGGAAGTTTCCTGGCTGTTGGAA CTGTTAAAGGAAATTTGCTTATTTATAATCATCAGACATCTCGAAAGATTCCTGTCCTTGGAAAACATACTAAGA ATCAGGAAGGTGACACGATAAGACAGACACAAGTGAGATCAGAGCCTAGCAACATGCAGTTTTTCTTGATGAAGA TGGATGACCGAACCTCTGCTGCAAAGCATGATAAGTGTGGTGCTTGGCAAGAAAACTTTGTTTTTTTAAATC TGAATGAACCAGATAACCCAGCTGATCTTGAATTTCAGCAGGACTTTGGCAACATTGTCTGCTATAATTGGTATG GTGATGGCCGCATCATGATTGGTTTTTCATGTGGACATTTTGTGGTCATTTCTACTCATACTGGAGAGCTTGGTC AAGAGATATTTCAGGCTCGTAACCATAAAGATAATCTAACCAGCATTGCAGTATCACAGACTCTTAACAAAGTTG ATGAGGAAAATAAAGGATTGGGTACCTTGTCCTGGACTGATGATGGCCAGTTGCTAGCACTCTCTACCCAAAGGG GCTCACTTCATGTTTTCCTGACCAAGCTTCCCATACTTGGGGATGCCTGCAGCACAAGGATTGCCTATCTCACCT CCCTCCTTGAAGTCACCGTAGCCAACCCTGTTGAAGGAGAGCTACCAATCACAGTTTCTGTTGATGTGGAACCCA ATGCTGTGAAAAATTGAAAGATATGGAGTATCTGGGAACAGTAGCCAGTATTTGCCTTCATTCTGACTATGCTG CTGCACTTTTTGAAGGCAAAGTCCAGTTACATTTGATAGAAAGCGAAATCTTGGATGCTCAAGAAGAACGTGAGA CTCGGCTTTTCCCAGCAGTGGATGATAAGTGCCGTATCTTATGCCATGCCTTAACTAGTGATTTCCTCATCTATG GTACAGATACTGGTGTCGTTCAGTATTTCTACATTGAAGACTGGCAATTCGTTAATGATTATCGACATCCTGTCA GTGTGAAAAAGATTTTCCCGACCCAAATGGGACCAGATTAGTTTTCATTGATGAAAAAAGTGATGGATTTGTTT GGCCAATGGATAAAGGTGTATTATTGCTTATGATGATGATAAGGTGTACACTTATGTCTTTCACAAGGACACTA TACAAGGAGCCAAGGTTATTTTGGCTGGTAGCACCAAAGTTCCTTTTGCTCATAAACCTTTGCTGCTATATAATG GAGAGCTGACCTGCCAAACACAGAGTGGAAAAGTAAACAACATCTACCTTAGCACCCATGGCTTTCTCAGCAACT TAAAAGATACGGGGCCTGACGAACTGAGACCAATGCTGGCACAGAATTTAATGCTAAAGAGGTTTTCTGATGCTT GGGAAATGTGCAGGATTCTGAATGATGAGGCTGCCTGGAATGAGTTGGCCAGAGCTTGTCTACATCACATGGAAG TGGAGTTTGCAATCCGTGTTTATCGGAGAATTGGAAATGTTGGCATAGTGATGTCCTTGGAACAAATAAAGGGAA TAGAGGACTACAATCTTTTGGCAGGACACCTTGCCATGTTTACCAACGATTATAACCTGGCTCAGGACTTGTACC TTGCATCCAGCTGTCCTATTGCTGCCCTGGAGATGAGAAGGGATTTACAGCATTGGGACAGTGCTCTACAACTGG CAAAGCATTTGGCCCCAGACCAGATACCTTTTATATCAAAAGAATATGCTATTCAGCTTGAATTCGCGGGTGATT ATGTAAATGCTTTGGCTCATTATGAGAAAGGAATAACAGGTGATAATAAGGAACATGATGAAGCTTGTCTGGCTG GAGTGGCCCAGATGTCCATAAGAATGGGAGACATACGTCGAGGGGTTAACCAAGCCCTCAAGCATCCCAGCAGGG TCCTTAAAAGAGACTGTGGAGCCATATTGGAGAATATGAAGCAATTTTCAGAAGCGGCCCAACTGTATGAAAAAG GTCTCTACTACGATAAAGCAGCATCTGTTTACATCCGCTCTAAGAATTGGGCAAAAGTTGGTGATCTTCTGCCCC ACGTTTCTTCTCCTAAGATCCATTTGCAGTATGCCAAAGCCAAGGAAGCAGATGGAAGATACAAAGAAGCTGTTG CTGTCAATATTGTTAGAGAGACCCAGTCTCTGGATGGAGCCAAAATGGTAGCCAGGTTTTTTCTACAGCTTGGTG ACTATGGGTCTGCCATCCAGTTTCTTGTCATGTCCAAATGCAACAATGAAGCTTTCACACTGGCTCAGCAACACA ACAAAATGGAAATCTATGCAGATATTATTGGTTCTGAAGACACTACTAATGAAGACTATCAAAGCATTGCCTTAT ACTTTGAAGGAGAAAAGAGATATCTTCAGGCTGGAAAATTCTTCTTGCTGTGTGGCCAATATTCACGAGCACTTA AACACTTCCTGAAATGCCCAAGCTCGGAAGATAATGTGGCAATAGAAATGGCAATTGAAACTGTTGGTCAGGCCA AAGATGAACTGCTGACCAATCAGCTGATAGACCATCTCCTGGGGGAGAACGATGGCATGCCTAAGGATGCCAAGT ACCTGTTCCGCTTGTACATGGCTCTGAAGCAATACCGAGAAGCTGCCCAGACTGCCATCATCATTGCCAGAGAAG TCAAAATTCCCTCCGAGATGGCCACCAACCTCATGATTCTGCACAGCTATATACTAGTAAAGATTCATGTTAAAA ATGGAGATCACATGAAAGGGGCTCGCATGCTCATTCGGGTGGCCAACAACATCAGCAAATTTCCATCACACATTG

PCT/US2003/028547

1546/6881 FIGURE 1429B

PCT/US2003/028547

FIGURE 1430

PCT/US2003/028547

1548/6881 FIGURE 1431

 ${\tt MQLKPMEINPEMLNKVLSRLGVAGQWRFVDVLGLEEESLGSVPAPACALLLLFPLTAQHENFRKKQIEELKGQEV\\ SPKVYFMKQTIGNSCGTIGLIHAVANNQDKLGFEDGSVLKQFLSETEKMSPEDRAKCFEKNEAIQAAHDAVAQEG\\ QCRVDDKVNFHFILFNNVDGHLYELDGRMPFPVNHGASSEDTLLKDAAKVCREFTEREQGEVRFSAVALCKAA}$

PCT/US2003/028547

1549/6881 FIGURE 1432

GCCATGGACCCTGTCTCAGTGTCATACCCATCTAATTACATGGAATCCATGAAGCCTAACAAGTATGGGGTCATC TACTCCACACCATTGCCTGAGAAGTTCTTTCAGACCCCAGAAGGTCTGTCGCACGGAATACAGATGGAGCCAGTG GACCTCACGGTGAACAAGCGGAGTTCACCCCCTTCGGCTGGGAATTCGCCCTCCTCTGAAGTTCCCGTCCTCA GGCGTGCAGCCCTTCGGCGTGCCGCTGTCCATGCCACCAGTGATGGCAGCTGCCCTCTCGCGGCATGGAATACGG CAGCCTCTCATGGTCTCCTTATCGGAGGAGATGGAAAATTCCAGTAGTAGCATGCAAGTACCTGTAATTGAATCA TATGAGAAGCCTATATCACAGAAAAAAATTAAAATAGAACCTGGGATCGAACCACAGAGGACAGATTATTATCCT GAAGAAATGTCACCCCCTTAATGAACTCAGTGTCCCCCCCGCAAGCATTGTTGCAAGAGAATCACCCTTCGGTC ATCGTGCAGCCTGGGAAGAGCCTTTACCTGTGGAATCCCCGGATACTCAAAGGAAGCGGAGGATACACAGATGT AAACCCTACAAATGTACATGGGAAGGGTGCACATGGAAGTTTGCTCGGTCTGATGAACTAACAAGACATTTCCGA AAACATACTGGAATCAAACCTTTCCAGTGCCCGGACTGTGACCGCAGCTTCTCCCGTTCTGACCATCTTGCCCTC CATAGGAAACGCCACATGCTAGTCTGATTGCCTCTGTGTCCTGCCTCAGCGTGACTCCCCACTCACCTGGCTCTC TCTCTGTCCTGCCTCCCATTATCTAACACATTTTTTACATGTACATTTTAATTTGATTCAGCTGGTCTGAATCTC CAGACCTAAAGAATGTGAACACTTTTTT

PCT/US2003/028547

FIGURE 1433

PCT/US2003/028547

1551/6881 FIGURE 1434

PCT/US2003/028547

FIGURE 1435

PCT/US2003/028547

1553/6881 FIGURE 1436

MERPSLRALLLGAAGLLLLLLPLSSSSSSDTCGPCEPASCPPLPPLGCLLGETRDACGCCPMCARGEGEPCGGGG AGRGYCAPGMECVKSRKRRKGKAGAAAGGPGVSGVCVCKSRYPVCGSDGTTYPSGCQLRAASQRAESRGEKAITQ VSKGTCEQGPSIVTPPKDIWNVTGAQVYLSCEVIGIPTPVLIWNKVKRGHYGVQRTELLPGDRDNLAIQTRGGPE KHEVTGWVLVSPLSKEDAGEYECHASNSQGQASASAKITVVDALHEIPVKKGEGAEL

PCT/US2003/028547

FIGURE 1437

GGCACGAGGCTCGGGTCAAATGCGCGCCTCGGACCCTAGTGCGCGTGCGCGCTGGTGGCTCCGCCCCTTTGGAGC TACTTCCTC<u>ATG</u>CTGCCCGCTCGCCTACCGTTCAGGCTGCTGAGCCTTTTCCTTCGTGGATCCGCTCCCACGGCA GCGCGCCATGGCCTCCGGGAGCCGCTCCTGGAGAGGAGGTGCGCTGCCGCCTCCTTCCAGCACTCATCGAGT CTGGGACGCGAGCTTCCTTATGACCCCGTGGACACGGAGGGCTTTGGAGAAGGTGGTGACATGCAGGAGCGTTTT CAGGAGGAGGAGGAGCAGCAGCAGCAGCGGCGGAGGAGCGACAGCAAAACCTACGGGCCAGGTCCCGG GAGCACCCGGTCGTGGGGCACCCGGACCCGGCATTGCCGCCCAGCGGCGTGAACTGCTCGGGGTGCGGGGCAGAG CTGCACTGCCAGGACGCCGGAGTGCCCGGCTACCTGCCCCGAGAGAAGTTCCTCCGCACGGCGGAGGCAGACGGC GGGCTGGCACGGACCGTGTGCCAGCGCTGCTGGCTGCTGCACCACCACCGGCGCGCTCTACGCCTGCAGGTGAGC $\tt CTGCTGGACCTGCCGACGCCTGCTGCCGGACTTGCCCGCGCTGGTGGGCCCCAAGCAGCTGATCGTGCTGGGA$ AACAAAGTGGACCTCCTGCCCCAGGATGCTCCTGGCTACCGGCAGAGGCTGCGGGAGCGACTGTGGGAGGACTGT GCCCGCGCCGGGCTCCTGGCCCCTGGCCACCAAGGGCCACAGCGCCCCGTCAAGGACGAGCCACAGGACGGG GAGAATCCGAATCCGCCGAACTGGTCCCGCACAGTGGTCAGGGACGTGCGGCTGATCAGCGCCAAGACCGGCTAT GGAGTGGAAGAGTTGATCTCTGCCCTTCAGCGCTCCTGGCGCTACCGTGGGGACGTCTACTTAGTGGGCGCCACC AACGCCGGCAAATCCACTCTCTTTAACACGCTCCTGGAGTCCGATTACTGCACTGCCAAGGGCTCCGAGGCCATC GACAGAGCCACCATCTCCCCTTGGCCAGGTACTACATTAAACCTTCTGAAGTTTCCTATTTGCAACCCAACTCCT TACAGAATGTTTAAAAGGCATCAAAGACTTAAAAAAGATTCAACTCAAGCTGAAGAAGATCTTAGTGAGCAAGAA CAAAATCAGCTTAATGTCCTCAAAAAGCATGGTTATGTCGTAGGAAGAGTTGGAAGGACATTCTTGTATTCAGAA GAACAGAAGGATAACATTCCCTTTGAGTTTGATGCTGATTCACTTGCCTTTGACATGGAAAATGACCCTGTTATG GGTACACACAAATCCACCAAACAAGTAGAATTGACTGCACAAGATGTGAAAGATGCCCACTGGTTTTATGACACC CCTGGAATTACAAAAGAAATTGTATTTTAAATCTTCTAACAGAAAAAGAAGTAAATATTGTTTTGCCAACACAG TCCATTGTTCCAAGAACTTTTGTGCTTAAACCAGGAATGGTTCTGTTTTTGGGTGCTATAGGCCGCATAGATTTC CTGCAGGGAAATCAGTCAGCTTGGTTTACAGTCGTGGCTTCCAACATCCTCCTGTGCATATCACCTCCTTGGAC AGGGCAGACGCTCTGTATCAGAAGCATGCAGGTCATACGTTACTCCAGATTCCAATGGGTGGAAAAGAACGAATG GCAGGATTTCCTCCTCTTGTTGCTGAAGACATTATGTTAAAAGAAGGACTGGGGGCATCTGAAGCAGTGGCCGAC ATCAAGTTTTCCTCTGCAGGTTGGGTTTCAGTAACACCTAATTTTAAGGACAGACTGCATCTCCGAGGCTATACA CCTGAAGGAACAGTTTTGACCGTCCGGCCCCTCTCTTGCCATATATTGTTAACATCAAAGGACAGCGCATCAAG AAAAGTGTGGCCTATAAAACCAAGAAGCCTCCTTCCCTTATGTACAACGTGAGGAAGAAGAAAGGAAAGATAAAT

PCT/US2003/028547

1555/6881 FIGURE 1438

MLPARLPFRLLSLFLRGSAPTAARHGLREPLLERRCAAASSFQHSSSLGRELPYDPVDTEGFGEGGDMQERFLFP
EYILDPEPQPTREKQLQELQQQQEEEERQRQQRREERRQQNLRARSREHPVVGHPDPALPPSGVNCSGCGAELHC
QDAGVPGYLPREKFLRTAEADGGLARTVCQRCWLLSHHRRALRLQVSREQYLELVSAALRRPGPSLVLYMVDLLD
LPDALLPDLPALVGPKQLIVLGNKVDLLPQDAPGYRQRLRERLWEDCARAGLLLAPGHQGPQRPVKDEPQDGENP
NPPNWSRTVVRDVRLISAKTGYGVEELISALQRSWRYRGDVYLVGATNAGKSTLFNTLLESDYCTAKGSEAIDRA
TISPWPGTTLNLLKFPICNPTPYRMFKRHQRLKKDSTQAEEDLSEQEQNQLNVLKKHGYVVGRVGRTFLYSEEQK
DNIPFEFDADSLAFDMENDPVMGTHKSTKQVELTAQDVKDAHWFYDTPGITKENCILNLLTEKEVNIVLPTQSIV
PRTFVLKPGMVLFLGAIGRIDFLQGNQSAWFTVVASNILPVHITSLDRADALYQKHAGHTLLQIPMGGKERMAGF
PPLVAEDIMLKEGLGASEAVADIKFSSAGWVSVTPNFKDRLHLRGYTPEGTVLTVRPPLLPYIVNIKGQRIKKSV
AYKTKKPPSLMYNVRKKKGKINV

WO 2004/030615 PCT/US2003/028547

1556/6881 FIGURE 1439

GAAAGCTGTATTTGCTGCACGTGGAAATCTCCGTTATTTTCCAGCACCCAACAGTAGCGTAATGGGAGTAACGGA CTTAACCTCATTTCTCTTTCAGAGCATTTAGCCTTCATATGCCCTTCCCTGCATGCTTCCCCCAGGCCGTCAAGA $\tt CTTGAGTTCTGCCTCGCTCCCGGCGCGGTCGCAGCCCTCAGCCCACTTAGGATAATGGCGACAGCTGAGGTACT$ GAACATTGGTAAAAAATTATATGAGGGTAAAACAAAAGAAGTCTACGAATTGTTAGACAGTCCAGGAAAAGTCCT AAATAAAATCACCAGTTGTATTTTCAGTTATTACAGGAAGCAGGTATTAAAACTGCCTTCACCAGAAAATGTGG GGAGACAGCTTTCATTGCACCGCAGTGTGAAATGATTCCAATTGAATGGGTTTGCAGAAGAATAGCAACTGGTTC TTTTCTCAAAAGAAATCCTGGTGTCAAGGAAGGATATAAGTTTTACCCACCTAAAGTGGAGTTGTTTTCAAGGA TGATGCCAATAATGACCCACAGTGGTCTGAGGAACAGCTGATTGCTGCAAAATTTTGCTTTGCTGGACTTCTTAT AGGCCAGACTGAAGTGGATATCATGAGTCATGCTACACAGGCTATATTTGAAATACTGGAGAAATCCTGGTTGCC CCAGAATTGTACACTGGTTGATATGAAGATTGAATTTGGTGTTGATGTAACCACCAAAGAAATTGTTCTTGCTGA TGTTATTGACAATGATTCCTGGAGACTCTGGCCATCAGGAGATCGAAGCCAACAGAAAGACAAACAGTCTTATCG GTTGCTTTTGAAATCAGAAAGTCAGTGCAGGGTTGTAGTGTTGATGGGCTCTACTTCTGATCTTGGTCACTGTGA AAAAATCAAGAAGGCCTGTGGAAATTTTGGCATTCCATGTGAACTTCGAGTAACATCTGCGCATAAAGGACCAGA TAATGGTTTGGGACCAGTGATGTCTGGGAACACTGCATATCCAGTTATCAGCTGTCCTCCCCTCACACCAGACTG GGGAGTTCAGGATGTGTGTCTTCTCTTCGACTACCCAGTGGTCTTGGCTGTTCAACCGTACTTTCTCCAGAAGG TAGAGAACACAAATAAAATGTATTAGTGAATAAATGCTTCTCTAGATCCATATTAATAAACATGAGCATCTAACC AGTATTGGTGGTCACTACTATTGAGTTTCTTCCTTAACACTGATTAAATGATCTTAACTCCCTCAGCTAAAACTG ${\tt CCCAGGCTGGAGTGCAGTGCTCACTCAGTTCACTGCTGCTTCCCTGGGCTCAAGCAGTTCTCCCACCT}$ $\tt CTCACTATGTCACCCAGGTTCGTCTCAAACTCCTGAACCCTAGTAATTCTCCTATCTCAGCCTCCCAAAGTGCTA$ GGCACTCATGAAAAAACAGAATGCTCCCAACTTTATTCATCTTCCAAGCCTGTAGCTCTTGGTATACTCACTGTT TGTTAATTTCTGATTAACCCTTGAATTTACCGTCTTCTCATCCTCTGTACAAAAGCCTCAAGTGAGGGTCAAATT CAACATTATCCTGATCTAGACAGCCCCCATTCTCAATCCACCCTTTTCCAAGTTGATTGCCCAAGGACTTCTAAC AATAAACTCTCTTTTGCACCACAGACTTCTTTGAAAATATACATGCTGTTGACCCTCTCTGTAGAAAACCGCACA CATAAAACTTACCAACAGATTTCATTGGTTCTTGGGTTCTCCCGAAGCCTATCCATGGTTTATAGATTAAGAATT AGGTCAGGAGTTTGAGACCAGCCTGGCCAACATGGTGAAACCCTGTCTCTACTAAAAATACAAAAAGTAGCCAGC CGTGATGACAGGCACCTGTAATCCCAGCTACTCGGGAGGCTGAGGCATGAGAATTGCTTGAACCCGGGAGGCGGA GGTTGCAGTGAGCCTAGATCATGCCACTGCACTCCAACCTGGGCAGCAGAGCAGAGCTCTGTCTCAAAAGGGGAA AAAAAAATTGCTGATGTGACCCATGAAGGGAACTCATTTTCCTCGTAATTTTGGACTGCCACACATTGGTACCT TTAGTTCTCTGAAGGCCCACGTTTTTATCATTAAGACCTATTTGTTAGCTAGTAGAGCTTTATGTTCGCTGTCCA CATTGTACACTTTATTTCCCTCACACTGTTATGCTCTGATGTGCTATGCTTAGCTATCTGTCAGAGATTAGTA AATTATAAAACTCATGTGTACTTAAGTTTATATCTTATGCTAGTTTATAAGAACAATTAAAAGGACTTAGAA GATTAA

PCT/US2003/028547

1557/6881 FIGURE 1440A

GGAATGTGGCGTGTTCGGGTGCATCGCCTCAGGAGAGTGGCCCACGCAGCTGGATGTACCGCATGTGATCACTCT GGGACTCGTGGGGCTGCAGCACCGGGGTCAGGAGAGTGCTGGTATTGTGACTAGTGATGGGAGTTCGGTGCCAAC ATTCAAATCACACAAGGGAATGGGTCTTGTAAATCACGTCTTTACTGAAGACAATTTGAAAAAATTATATGTTTC ${\tt AAATCTTGGAATTGGACACCACGGTATGCCACCACGGAAAATGTGAACTAGAAAATTGTCAGCCCTTCG} {\tt TTGT}$ TGAAACACTTCATGGGAAGATAGCTGTGGCACATAATGGCGAATTGGTAAATGCTGCTCGATTAAGGAAAAAGCT TCTGCGTCATGGTATTGGTCTGTCTACAAGTTCTGATAGTGAAATGATTACCCAGTTACTGGCGTATACCCCTCC CCTGCTTATAATGCACAGAGATGTTATTTATGCAGTACGAGATCCTTATGGAAATCGTCCCTTATGCATTGGTCG ATCTTGTAGCTTCTTATCTATTGGTGCAAGATATTACCGTGAAGTCTTGCCTGGAGAAATTGTGGAAATATCCAG ACACAATGTCCAAACTCTTGATATTATATCAAGGTCTGAAGGAAACCCAGTGGCTTTTTGTATCTTTGAATATGT TTATTTTGCAAGACCAGACAGTATGTTCGAAGACCAAATGGTTTATACAGTAAGATACCGTTGTGGCCAGCAGCT AGCGATTGAAGCACCTGTGGATGCAGATTTGGTTAGCACTGTTCCAGAATCTGCTACGCCTGCTCTTGCTTA AAACATGAGGTTAAGACAACTTGGTGTTGCAAAAAAATTTGGAGTATTGTCAGACAACTTTAAAGGCAAAAGAAT TGTTCTTGTAGATGATTCAATTGTCAGAGGCAATACCATCTCACCTATAATAAAACTGCTCAAAGAATCTGGTGC AAAAGAGGTACACATTCGAGTAGCTTCACCACCAATTAAATATCCATGCTTCATGGGAATAAACATTCCTACAAA AGAAGAGCTCATTGCCAATAAACCAGAATTTGATCACCTTGCAGAATATCTAGGAGCAAACAGTGTTGTGTATCT GTCAGTAGAAGGACTGGTTTCATCTGTACAAGAAGGGATAAAGTTTAAAAAACAGAAAGGAAAAAACACACAATAT TATGATCCAAGAAAATGGAAATGGTCTGGAATGTTTTGAAAAGAGTGGTCATTGTACAGCTTGTCTCACTGGAAA ATATCCTGTAGAATTAGAATGGTAGCTGGTAGGGTTGGATGTGTGTAGTTTCAAGATAGAAAGTTGGTCAAGAAG TTATAGTGGTCACCCCCATCTATTTACTGTTACTCAGTTGGTACAATGTAAAATGCCATGCTTATGTTTATAAG TTTTGAGATTTTTTTTTTTTCTGAAAAGGATACCAAAGTGCGATAACTGAACATTTCCAATTGCATATAATACAA CAATATGTGGTGTTCTTTTTTTACACAAGCATTGGCTAGCCTTTTTAACCTGGTCAGAGAAGGCAGGTGGTCAC TGACATTTCCCAAGTCCATGCTTTAAAGGGTTTGCAAGAAGTTAGGGTTAAGGAGAGGTGATGCCAACAAGACAG GTGAGTTAAATATACCATTTCACACAAAGTTTGAATAGAATACATTATACCTCATAGGTGTCTAGCCTCTACAGT TGTGATTTGAGCCATCATTTCACTTCTGATTTTAAGACAACTCATGATTGTTAGCTTTCAGAAAGCTAATGATTG TTAACTTTTTGAAATTAGTTTACAATTAATTAAGATTTCATTATGATGGAAGGAGACATAATTGGCAGATCTTTG CCATCTCTCTTTGAGATGTCCTAAAAAGGGTTGTAAAAATCTGTGAAAAAGTTTTTCCTACATTTGACTAGAAAA TGTGATCCATAGTATTTAGTGCCCTGATACTATAAGCTCAGCAAGTAACCTGGTACATTTGAAATAAAAACCAAA ACTTGCAAACATATATACATGTAGATGTACATATACATGTACACATACACATAAATATTATTGCAATTAAGTGAT CAAGTACAGACACAATAGGGGCCAGTTTTGTTTAAGGATCAAAGAGACAACCACTTTGGGGAATTAGTATCAACT TACAATCCAAGTCCAAGTATCATCTTATAATCACTTTTTTCTACTATATAAGATCTAATGAATTTGATTTCTTT TTTGAAGTTTTTTCTTGTAACATCTGAGATTAGAAGTTTAAGATGACTTGACCCCAAACCTTTGTTTATGTAAGA ATTTTTAAACATAAAAGTGTTTGTTTCTGTTATGTTACCATAATTTGATGTATATAGTGTCCAGATCCATTTAGA CCAAGATAAAATTTTGACAGCTCTTTAAGCCCACATGCAGCAGTGGGTCAGATAACCCTGTGGCAGTGACACGGG CAAATTGGCATTTGAATAAAGCCCTGGGACCACCTCAACATGCGTAGCCTCTTGTCTTAAATGTACTCCCCATGG CAGCATGGAGGAGGCAAGACCTGTGGGTCAATTTTGAACTGGCCTTACTTTGATTTTTAAAACAAGAGACTCAGG GAAAGTACTAAACCAAAATCTCTGATTTTACTTTGCGTTTTCTGTAGTTTTTGTTTACTGAGATGCTTTTGTAA AGGAAAATAATACTGTGACAGTTTAGTAATTCTACAGATTCTTAATATTTCTCCATCATGGCCTTTTACTTCACA ATTTTCTGAAGTCTGAATTCAATTACAATTTTTTTTTACCAATTTAATCTCAAATGTTGTTTAACTGCTTTAAAT TCATATACGTAGAGTATTATAAACTGCAGAGATGAAAAATGTGTTTTCACGGGATTTATATTGTGAACTAAACTA

PCT/US2003/028547

1558/6881 FIGURE 1440B

 ${\tt AGCCTACTTTTGTGACTTATTTGTGATGCCTTGTTGATAAATATGTGTAATAAGTATGTTTT}$

PCT/US2003/028547

1559/6881 FIGURE 1441

PCT/US2003/028547

FIGURE 1442

GTTTTTAGTTTGTTAGCTGCCTGGAGTGTTATTTTAAGAAAGCAGAAGCACCATCATTTGCACACTCCTTATAGA TCACACCCTTAACCCTGACTTTTTTTGCTCCAGTTTTTCAGAAGAAGTGAAGTCAAGATGAAGAACCATTTGCT TTTCTGGGGAGTCCTGGCGGTTTTTATTAAGGCTGTTCATGTGAAAGCCCAAGAAGATGAAAGGATTGTTCTTGT TGACAACAAATGTAAGTGTGCCCGGATTACTTCCAGGATCATCCGTTCTTCCGAAGATCCTAATGAGGACATTGT GGAGAGAAACATCCGAATTATTGTTCCTCTGAACAACAGGGAGAATATCTCTGATCCCACCTCACCATTGAGAAC CAGATTTGTGTACCATTTGTCTGACCTCTGTAAAAAATGTGATCCTACAGAAGTGGAGCTGGATAATCAGATAGT TACTGCTACCCAGAGCAATATCTGTGATGAAGACAGTGCTACAGAGACCTGCTACACTTATGACAGAAACAAGTG CTACACAGCTGTGGTCCCACTCGTATATGGTGGTGAGACCAAAATGGTGGAAACAGCCTTAACCCCAGATGCCTG $\verb|CTATCCTGACTAATTTAAGTCATTGCTGACTGCATAGCTCTTTTTCTTGAGAGGCTCTCCATTTTGATTCAGAAA| \\$ GCCACCAAAATAATTAAAATAGTCACATTGTTATCTTTATTAGGTAATCACTTCTTAATTATATGTTCATACTCT AAGTATCAAAATCTTCCAATTATCATGCTCACCTGAAAGAGGTATGCTCTCTTAGGAATACAGTTTCTAGCATTA AACAAATAAACAAGGGGAGAAAATAAAACTCAAGGACTGAAAATCAGGAGGTGTAATAAAATGTTCCTCGCATTC CCCCCGCTTTTTTTTTTTTTTTTTGCCTTGGAGAGCCAGAGCTTCCGCATTTTCTTTACTATTCTTTTT AAAAAAGTTTCACTGTGTAGAGAACATATATGCATAAACATAGGTCAATTATATGTCTCCATTAGAAAAATAAT **AATTGGAAAACATGTTCTAGAACTAGTTACAAAAATAATTTAAGGTGAAATCTCTAATATTTATAAAAGTAGCAA** AATAAATGCATAATTAAAATATTTTGGACATAACAGACTTGGAAGCAGATGATACAGACTTCTTTTTTTCATAA TCAGGTTAGTGTAAGAAATTGCCATTTGAAACAATCCATTTTGTAACTGAACCTTATGAAATATATGTATTTCAT GGTACGTATTCTCTAGCACAGTCTGAGCAATTAAATAGATTCATAAGCATA

PCT/US2003/028547

FIGURE 1443

TTAGAGAGGCCGGGATTATGAAAAGAATAAAGTCTGCAAGGAATTCTCCCATCTGGGAAAGGAGGACTTCACA TCTCTGTCACTAGTCCTGTACAGTAGAAAATTTCCCAGTGGCACGTTTGAACAGGTCAGCCAACTTGTGAAGGAA GTTGTCTCCTTGACCGAAGCCTGCTGTGCGGAAGGGGCTGACCCTGACTGCTATGACACCAGGACCTCAGCACTG TCTGCCAAGTCCTGTGAAAGTAATTCTCCATTCCCCGTTCACCCAGGCACTGCTGAGTGCTGCACCAAAGAGGGC GATGAAATCTGTGAGGCGTTCAGGAAAGATCCAAAGGAATATGCTAATCAATTTATGTGGGAATATTCCACTAAT TACGGACAAGCTCCTCTGTCACTTTTAGTCAGTTACACCAAGAGTTATCTTTCTATGGTAGGGTCCTGCTGTACC TCTGCAAGCCCAACTGTATGCTTTTTGAAAGAGAGACTCCAGCTTAAACATTTATCACTTCTCACCACTCTGTCA **AATAGAGTCTGCTCACAATATGCTGCTTATGGGGAGAAGAATCAAGGCTCAGCAATCTCATAAAGTTAGCCCAA** AAAGTGCCTACTGCTGATCTGGAGGATGTTTTGCCACTAGCTGAAGATATTACTAACATCCTCTCCAAATGCTGT GAGTCTGCCTCTGAAGATTGCATGGCCAAAGAGCTGCCTGAACACACAGTAAAACTCTGTGACAATTTATCCACA GTCATGGATAAGTATACATTTGAACTAAGCAGAAGGACTCATCTTCCGGAAGTATTCCTCAGTAAGGTACTTGAG CCAACCCTAAAAAGCCTTGGTGAATGCTGTGATGTTGAAGACTCAACTACCTGTTTTAATGCTAAGGGCCCTCTA CTAAAGAAGGAACTATCTTCTTTCATTGACAAGGGACAAGAACTATGTGCAGATTATTCAGAAAATACATTTACT GAGTACAAGAAAAACTGGCAGAGCGACTAAAAGCAAAATTGCCTGATGCCACACCCACGGAACTGGCAAAGCTG GTTAACAAGCACTCAGACTTTGCCTCCAACTGCTGTTCCATAAACTCACCTCCTCTTTACTGTGATTCAGAGATT ${\tt GATGCTGAATTGAAGAATATCCTG} \underline{{\tt TAG}} {\tt TCCTGAAGCATGTTTATTAACTTTGACCAGAGTTGGAGCCACCCAGGG}$ GAATGATCTCTGATGACCTAACCTAAGCAAAACCACTGAGCTTCTGGGAAGACAACTAGGATACTTTCTACTTTT AT

PCT/US2003/028547

1562/6881 FIGURE 1444

MKRVLVLLLAVAFGHALERGRDYEKNKVCKEFSHLGKEDFTSLSLVLYSRKFPSGTFEQVSQLVKEVVSLTEACC AEGADPDCYDTRTSALSAKSCESNSPFPVHPGTAECCTKEGLERKLCMAALKHQPQEFPTYVEPTNDEICEAFRK DPKEYANQFMWEYSTNYGQAPLSLLVSYTKSYLSMVGSCCTSASPTVCFLKERLQLKHLSLLTTLSNRVCSQYAA YGEKKSRLSNLIKLAQKVPTADLEDVLPLAEDITNILSKCCESASEDCMAKELPEHTVKLCDNLSTKNSKFEDCC QEKTAMDVFVCTYFMPAAQLPELPDVELPTNKDVCDPGNTKVMDKYTFELSRRTHLPEVFLSKVLEPTLKSLGEC CDVEDSTTCFNAKGPLLKKELSSFIDKGQELCADYSENTFTEYKKKLAERLKAKLPDATPTELAKLVNKHSDFAS NCCSINSPPLYCDSEIDAELKNIL

PCT/US2003/028547

1563/6881 FIGURE 1445

AGCTTTTCTCTTCTGTCAACCCCACACGCCTTTGGCACAATGAAGTGGGTAACCTTTATTTCCCTTCTTTTTCTC TTTAGCTCGGCTTATTCCAGGGGTGTGTTTCGTCGAGATGCACAAGAGTGAGGTTGCTCATCGGTTTAAAGAT TTGGGAGAAAAATTTCAAAGCCTTGGTGTTGATTGCCTTTGCTCAGTATCTTCAGCAGTGTCCATTTGAAGAT CATGTAAAATTAGTGAATGAAGTAACTGAATTTGCAAAAACATGTGTTGCTGATGAGTCAGCTGAAAATTGTGAC AAATCACTTCATACCCTTTTTGGAGACAAATTATGCACAGTTGCAACTCTTCGTGAAACCTATGGTGAAATGGCT GACTGCTGTGCAAAACAAGAACCTGAGAGAAATGAATGCTTCTTGCAACACAAAGATGACAACCCAAACCTCCCC CGATTGGTGAGACCAGAGGTTGATGTGATGTGCACTGCTTTTCATGACAATGAAGAGACATTTTTGAAAAAATAC TTATATGAAATTGCCAGAAGACATCCTTACTTTTATGCCCCGGAACTCCTTTTCTTTGCTAAAAGGTATAAAGCT GGGAAGGCTTCGTCTGCCAAACAGAGACTCAAGTGTGCCAGTCTCCAAAAATTTGGAGAAAAGAGCTTTCAAAGCA TGGGCAGTAGCTCGCCTGAGCCAGAGATTTCCCAAAGCTGAGTTTGCAGAAGTTTCCAAGTTAGTGACAGATCTT ACCAAAGTCCACACGGAATGCTGCCATGGAGATCTGCTTGAATGTGCTGATGACAGGGCGGACCTTGCCAAGTAT ATCTGTGAAAATCAAGATTCGATCTCCAGTAAACTGAAGGAATGCTGTGAAAAACCTCTGTTGGAAAAATCCCAC TGCATTGCCGAAGTGGAAAATGATGAGATGCCTGCTGACTTGCCTTCATTAGCTGCTGATTTTGTTGAAAGTAAG GATGTTTGCAAAAACTATGCTGAGGCAAAGGATGTCTTCCTGGGCATGTTTTTGTATGAATATGCAAGAAGGCAT CCTGATTACTCTGTCGTGCTGCTGCTGAGACTTGCCAAGACATATGAAACCACTCTAGAGAAGTGCTGTGCCGCT GCAGATCCTCATGAATGCTATGCCAAAGTGTTCGATGAATTTAAACCTCTTGTGGAAGAGCCTCAGAATTTAATC AAACAAAATTGTGAGCTTTTTGAGCAGCTTGGAGAGTACAAATTCCAGAATGCGCTATTAGTTCGTTACACCAAG AAAGTACCCCAAGTGTCAACTCCAACTCTTGTAGAGGTCTCAAGAAACCTAGGAAAAGTGGGCAGCAAATGTTGT CATGAGAAAACGCCAGTAAGTGACAGAGTCACCAAATGCTGCACAGAATCCTTGGTGAACAGGCGACCATGCTTT TCAGCTCTGGAAGTCGATGAAACATACGTTCCCAAAGAGTTTAATGCTGAAACATTCACCTTCCATGCAGATATA GCAACAAAAGAGCAACTGAAAGCTGTTATGGATGATTTCGCAGCTTTTGTAGAGAAGTGCTGCAAGGCTGACGAT AAGGAGACCTGCTTTGCCGAGGAGGGTAAAAAACTTGTTGCTGCAAGTCAAGCTGCCTTAGGCTTATAACATCAC ATTTAAAAGCATCTCAGCCTACCATGAGAATAAGAGAAAGGAAAATGAAGATCAAAAGCTTATTCATCTGTTTTTC TTTTTCGTTGGTGTAAAGCCAACACCCTGTCTAAAAAACATAAATTTCTTTAATCATTTTGCCTCTTTTCTCTGT GCTTCAATTAATAAAAATGGAAAGAATCTAATAGAGTGGTACAGCACTGTTATTTTTCAAAGATGTGTTGCTAT CCTGAAAATTCTGTAGGTTCTGTGGAAGTTCCAGTGTTCTCTCTTATTCCACTTCGGTAGAGGATTTCTAGTTTC TTGTGGGCTAATTAAATAAATCATTAATACTCTTCTAAGTT

PCT/US2003/028547

FIGURE 1446

 ${\tt TCCATATTGTGCTTCCACCACTGCCAATAACAAAATAACTAGCAACC} {\tt ATG} {\tt AAGTGGGTGGAATCAATTTTTTAA}$ $\overline{\mathtt{TTTTCCTACTAAATTTTACTGAATCCAGAACACTGCATAGAAATGAATATGGAATAGCTTCCATATTGGATTCTT}$ ACCAATGTACTGCAGAGATAAGTTTAGCTGACCTGGCTACCATATTTTTTGCCCAGTTTGTTCAAGAAGCCACTT ACAAGGAAGTAAGCAAAATGGTGAAAGATGCATTGACTGCAATTGAGAAACCCACTGGAGATGAACAGTCTTCAG ATTCAGACTGCTGCAGCCAAAGTGAAGAGGGAAGACATAACTGTTTTCTTGCACACAAAAAGCCCACTCCAGCAT CGATCCCACTTTTCCAAGTTCCAGAACCTGTCACAAGCTGTGAAGCATATGAAGAAGACAGGGAGACATTCATGA ACAAATTCATTTATGAGATAGCAAGAAGGCATCCCTTCCTGTATGCACCTACAATTCTTCTTTGGGCTGCTCGCT TCCAAGCCATAACTGTTACTAAACTGAGTCAGAAGTTTACCAAAGTTAATTTTACTGAAATCCAGAAACTAGTCC TGGATGTGGCCCATGTACATGAGCACTGTTGCAGAGGAGATGTGCTGGATTGTCTGCAGGATGGGGAAAAAATCA GTGGTCAATGTATAATTCATGCAGAAAATGATGAAAAAACCTGAAGGTCTATCTCCAAATCTAAACAGGTTTTTAG GAGATAGAGATTTTAACCAATTTTCTTCAGGGGAAAAAAATATCTTCTTGGCAAGTTTTGTTCATGAATATTCAA GAAGACATCCTCAGCTTGCTGTCTCAGTAATTCTAAGAGTTGCTAAAGGATACCAGGAGTTATTGGAGAAGTGTT TCCAGACTGAAAACCCTCTTGAATGCCAAGATAAAGGAGAAGAAGAATTACAGAAATACATCCAGGAGAGCCAAG ACACAAAGAAAGCCCCCCAGCTGACCTCGTCGGAGCTGATGGCCATCACCAGAAAAATGGCAGCCACAGCAGCCA GTATCAGACATGAAATGACTCCAGTAAACCCTGGTGTTGGCCAGTGCTGCACTTCTTCATATGCCAACAGGAGGC CATGCTTCAGCAGCTTGGTGGTGGATGAAACATATGTCCCTCCTGCATTCTCTGATGACAAGTTCATTTTCCATA AGGATCTGTGCCAAGCTCAGGGTGTAGCGCTGCAAACGATGAAGCAAGAGTTTCTCATTAACCTTGTGAAGCAAA ${\tt GCCAGGAACAGGAAGTCTGCTTTGCTGAAGAGGGACAAAAACTGATTTCAAAAACTCGTGCTTGTGGGAGTT\underline{{\tt T}}$ $\underline{\textbf{AA}} \textbf{ATTACTTCAGGGGAAGAGAAAACGAGTCTTTCATTCGGTGTGAACTTTTCTCTTTAATTTTAACTGAT$ TTAACACTTTTTGTGAATTAATGAAATGATAAAGACTTTTATGTGAGATTTCCTTATCACAGAAATAAAATATCT CCAAATG

PCT/US2003/028547

1565/6881 FIGURE 1447

MKWVESIFLIFLLNFTESRTLHRNEYGIASILDSYQCTAEISLADLATIFFAQFVQEATYKEVSKMVKDALTAIE KPTGDEQSSGCLENQLPAFLEELCHEKEILEKYGHSDCCSQSEEGRHNCFLAHKKPTPASIPLFQVPEPVTSCEA YEEDRETFMNKFIYEIARRHPFLYAPTILLWAARYDKIIPSCCKAENAVECFQTKAATVTKELRESSLLNQHACA VMKNFGTRTFQAITVTKLSQKFTKVNFTEIQKLVLDVAHVHEHCCRGDVLDCLQDGEKIMSYICSQQDTLSNKIT ECCKLTTLERGQCIIHAENDEKPEGLSPNLNRFLGDRDFNQFSSGEKNIFLASFVHEYSRRHPQLAVSVILRVAK GYQELLEKCFQTENPLECQDKGEEELQKYIQESQALAKRSCGLFQKLGEYYLQNAFLVAYTKKAPQLTSSELMAI TRKMAATAATCCQLSEDKLLACGEGAADIIIGHLCIRHEMTPVNPGVGQCCTSSYANRRPCFSSLVVDETYVPPA FSDDKFIFHKDLCQAQGVALQTMKQEFLINLVKQKPQITEEQLEAVIADFSGLLEKCCQGQEQEVCFAEEGQKLI SKTRAALGV

PCT/US2003/028547

1566/6881 FIGURE 1448A

TCACTTGCCTGATATTTCCAGTGTCAGAGGGACACAGCCAACGTGGGGTCCCTTCTAGGCTGACAGCCGCTCTCC AGCCACTGCCGCGAGCCCGTCTGCTCCGCCCTGCCCGTGCACTCTCCGCAGCCGCCCTCCGCCAAGCCCCAGCG CCCGCTCCCATCGCCGATGACCGCGGGGAGGAGGATGGAGATGCTCTGTGCCGGCAGGGTCCCTGCGCTGCT CTGCCTGGGTTTCCATCTTCTACAGGCAGTCCTCAGTACAACTGTGATTCCATCATGTATCCCAGGAGAGTCCAG TGATAACTGCACAGCTTTAGTTCAGACAGAAGACAATCCACGTGTGGCTCAAGTGTCAATAACAAAGTGTAGCTC AGTGGGTTATACTGGTGTCCGATGTGAACACTTCTTTTTAACCGTCCACCAACCTTTAAGCAAAGAATATGTGGC TTTGACCGTGATTCTTATTATTTTGTTTCTTATCACAGTCGTCGGTTCCACATATTATTTCTGCAGATGGTACAG AAATCGAAAAAGTAAAGAACCAAAGAAGGAATATGAGAGAGTTACCTCAGGGGATCCAGAGTTGCCGCAAGTCTG AATGGCGCCATCAAACTTATGGGCAGGGATAACAGTGTGCCTGGTTAATATTAATATTCCCATTTTATTAATAAT ATTTATGTTGGGTCAAGTGTTAGGTCAATAACACTGTATTTTAATGTACTTGAAAAATGTTTTTATTTTTGTTTT ATTTTTGACAGACTATTTGCTAATGTATAATGTGCAGAAAATATTTAATATCAAAAGAAAATTGATATTTATA CAAGTAATTTCCTGAGCTAAATGCTTCATTGAAAGCTTCAAAGTTTATATGCCTGGTGCACAGTGCTTAGAAGTA GATTTAGTAAGTATGTTTTTTATGTTCCTCAAATCAGTGATAATTGGTTTGACTGTACCATGGTTTGATATGTAG TTGGCACCATGGTATCATATATAAAACAATAATGCAATTAGAATTTGGGAGAAGCAAATATAGGTCCTGTGTTA AACACTACACATTTGAAACAAGCTAACCCTGGGGAGTCTATGGTCTCTTCACTCAGGTCTCAGCTATAATTCTGT TATATGAGGGGCAGTGGACAGTTCCCTATGCCAACTCACGACTCCTACAGGTACTAGTCACTCATCTACCAGATT AATGTTCCTTTTTTGTATATTACAACATTTATGTGAGGTAATTATTGCTCAACAGACAATTAGAAAAAAGTCCAC ACTTGAAGCCTAAATTTGTGCTTTTTAAGAATATTTTTTAGACTATTTCTTTTTATAGGGGGCTTTGCTGAATTCTA ACATTAAATCACAGCCCAAAATTTGATGGACTAATTATTATTTTAAAATATATGAAGACAATAATTCTACATGTT GTCTTAAGATGGAAATACAGTTATTTCATCTTTTATTCAAGGAAGTTTTAACTTTAATACAGCTCAGTAAATGGC TTCTTCTAGAATGTAAAGTTATGTATTTAAAGTTGTATCTTGACACAGGAAATGGGAAAAAACTTAAAAATTAAT ATGGTGTATTTTTCCAAATGAAAAATCTCAATTGAAAGCTTTTAAAATGTAGAAACTTAAACACACCTTCCTGTG GAGGCTGAGATGAAAACTAGGGCTCATTTTCCTGACATTTGTTTATTTTTTGGAAGAGACAAAGATTTCTTCTGC ACTCTGAGCCCATAGGTCTCAGAGAGTTAATAGGAGTATTTTTGGGCTATTGCATAAGGAGCCACTGCTGCCACC ACTTTTGGATTTTATGGGAGGCTCCTTCATCGAATGCTAAACCTTTGAGTAGAGTCTCCCTGGATCACATACCAG GTCAGGGAGGATCTGTTCTTCCTCTACGTTTATCCTGGCATGTGCTAGGGTAAACGAAGGCATAATAAGCCATGG CTGACCTCTGGAGCACCAGGTGCCAGGACTTGTCTCCATGTGTATCCATGCATTATATACCCTGGTGCAATCACA AGTCATTTGGTGCTCTGCTAACCATTTATATAAAACTTAAAAACAAGAGAAAAAGAAAAATCAATTAGATCTAAAC AGTTATTTCTGTTTCCTATTTAATACAGCTGAAGTCAAAATATGTAAGAACACATTTTAAATACTCTACTTACAG CCAGGTTGGAGTGCAGTGGCACGATCTCGGCTCACTGCAACCTCACCTCCCGGGTTCAAGAGATCCTCCTGCCTC AGCCTCCTGAGCAGCTGGGACTACAGGCGCATGCCACCATGCCCAGCTAATTTTTGTATTTTAGTAGAGGCGGG GTTTCACCATGTTGGCCAGGATGGTCTCAATCTCCTAACCTTGAGATCCACCCTCCACAGCCTCCCAAACTGCTG GGATTACAGGTGTGAGCCACCGCACGTAGCATTTACATTAGGTATTACAAGTAATGTAAAGATGATTTAAGTATA CAGGAGGATGTGAATAGGTTATATGCAAGCACTATGCCCTTTTATATAAGTGACTTGAACATCTGTGCCCGATTT CTAGATGTGAGGAGAGTCTGAATATTTTCAGTGATCTTGGCTGTTTCAAAAAAATCTATTGACTTTTCAATAAAT CAGCTGCAATCCATTTATTTCATTTACAAAAGATTTATTGTAAGCATCTCAATCTTGGTTTGTCAGTTTATCTTA AGCATGTCAATTCATAAAAACAAGTCATTTTTGTATTTTTCATCTTTAAGAATGCTTAAAAAAAGCTAATCCCTAA AATAGTTAGATCTTTGTAAATGCATATTAAATAATAAGTATGACCCACATTACTTTTTATGGGTGAAAATAAGA CAAAAATAATAGTTTTAGTGAGGATGGTGCTGAGTAAACATAAAAACTGATTTGCTCTCAGCTGATGTCCTGT ACACAGTGGGAAGATTTTAGTTCACACTTAGTCTAACTCCCCCATTTTACAGATTTCTCACTATATATTTTCTA

PCT/US2003/028547

1567/6881 FIGURE 1448B

PCT/US2003/028547

FIGURE 1449

TTTCTTTTCTTTCCCCCCCCCCCCTTTCACCATTTCCCCTCGGAGGCGCTTTCCCCGGGCAGGGCAGAGCC GGTCTCACCCCCGCCTCTCCCCGGCCCCCCCCCCTATGGCGAGAGGGAGCCCCCTCCCAACCCGGGCTCGAG GCTCGAGCGCCAGCGCCCGCGCCCCCCGATCCGCTTCCCCTTTCTCCCTCAGTTGGCCGAGTCGTC $\verb|CCGCGCGCCTCCGCGCGCCTATGAGAATGAGGTGGTAACGGGCCCCCGGATGACCCCGCGTCACCACTGT|\\$ ${\tt GGCAGATCCAAAGGATATC} \underline{{\tt ATG}} {\tt AGTTTCCAGGGCCTTTGGAAAACCAGAGATTGTCTTTCCTGTTGGAAAAGGC}$ ANTCACTAGGGAAGCACAGATGTGGAAAGTGAATGTGCGGAAAATGCCTTCAAATCAGAATGTTTCTCCATCCCA GAGAGATGAAGTAATTCAATGGCTGGCCAAACTCAAGTACCAATTCAACCTTTACCCAGAAACATTTGCTCTGGC TAGCAGTCTTTTGGATAGGTTTTTAGCTACCGTAAAGGCTCATCCAAAATACTTGAGTTGTATTGCAATCAGCTG TTTTTTCCTAGCTGCCAAGACTGTTGAGGAAGATGAGAGAATTCCAGTACTAAAGGTATTGGCAAGAGACAGTTT CTGTGGATGTTCCTCATCTGAAATTTTGAGAATGGAGAGAATTATTCTGGATAAGTTGAATTGGGATCTTCACAC AGCCACACCATTGGATTTTCTTCATATTTTCCATGCCATTGCAGTGTCAACTAGGCCTCAGTTACTTTTCAGTTT TCTGCAATTCAGAGGATCCATGCTTGCTCTGGCCATGGTTAGTCTGGAAATGGAGAAACTCATTCCTGATTGGCT TTCTCTTACAATTGAACTGCTTCAGAAAGCACAGATGGATAGCTCCCAGTTGATCCATTGTCGGGAGCTTGTGGC ACATCACCTTTCTACTCTGCAGTCTTCCCTGCCTCTGAATTCCGTTTATGTCTACCGTCCCCTCAAGCACACCCT GGTGACCTGTGACAAAGGAGTGTTCAGATTACATCCCTCCTCTGTCCCAGGCCCAGACTTCTCCAAGGACAACAG CAAGCCAGAAGTGCCAGTCAGAGGTACAGCAGCCTTTTACCATCATCTCCCAGCTGCCAGTGGGTGCAAGCAGAC CTCTACTAAACGCAAAGTAGAGGAAATGGAAGTGGATGACTTCTATGATGGAATCAAACGGCTCTATAATGAAGA TAATGTCTCAGAAAATGTGGGTTCTGTGTGTGGCACTGATTTATCAAGACAAGAGGGACATGCTTCCCCTTGTCC ACCTTTGCAGCCTGTTTCTGTCATGTAGTTTCAACAAGTGCTACCTTTGAGTGTAAACTAAGGTAGACTACTITG GGAATGAGAACATGCAAAATCAGGAAAGGCTGTAGAAGGAAATATACCTTAACAGGCTGATTTGGAGTGAGCCAG AAAAAAAAATAAACTCTCATTATTTGTGTGGCTAATTATAATTCAGCGTTATTTAAGCACATAAAGACCAAAA ΑΑΑΑΑΑΑΑΑΑΑΑΑ

PCT/US2003/028547

1569/6881 FIGURE 1450

MKFPGPLENQRLSFLLEKAITREAQMWKVNVRKMPSNQNVSPSQRDEVIQWLAKLKYQFNLYPETFALASSLLDR FLATVKAHPKYLSCIAISCFFLAAKTVEEDERIPVLKVLARDSFCGCSSSEILRMERIILDKLNWDLHTATPLDF LHIFHAIAVSTRPQLLFSLPKLSPSQHLAVLTKQLLHCMACNQLLQFRGSMLALAMVSLEMEKLIPDWLSLTIEL LQKAQMDSSQLIHCRELVAHHLSTLQSSLPLNSVYVYRPLKHTLVTCDKGVFRLHPSSVPGPDFSKDNSKPEVPV RGTAAFYHHLPAASGCKQTSTKRKVEEMEVDDFYDGIKRLYNEDNVSENVGSVCGTDLSRQEGHASPCPPLQPVS VM

PCT/US2003/028547

FIGURE 1451

CTGCTGGTCAGCCAGCCTCTCCCAGTCCAAGGTGTTCTGGAGGTCTATTACACAAGCTTGAGGTGTAGATGTGTC CAAGAGAGCTCAGTCTTTATCCCTAGACGCTTCATTGATCGAATTCAAATCTTGCCCCGTGGGAATGGTTGTCCA ATGATGGAAGTATTGAGAAAAAGAAGTTCTTCAACTCTACCAGTTCCAGTGTTTAAGAGAAAAGATTCCCTGATGC TGATATTTCCACTAAGAACACCTGCATTCTTCCCTTATCCCTGCTCTGGATTTTAGTTTTGTGCTTAGTTAAATC TTTTCCAGGAAAAGAACTTCCCCATACAAATAAGCATGAGACTATGTAAAAATAACCTTGCAGAAGCTGATGGG GCAAACTCAAGCTTCTTCACTCACAGCACCCTATATACACTTGGAGTTTGCATTCTTATTCATCAGGGAGGAAAG AATTTCTTAGAAAACAATGGAATGAGAATTTAAGCCTCAAATTTGAACATGTGGCTTGAATTAAGAAGAAAATTA TGGCATATATTAAAAGCAGGCTTCTATGAAAGACTCAAAAAGCTGCCTGGGAGGCAGATGGAACTTGAGCCTGTC AAGAGGCAAAGGAATCCATGTAGTAGATATCCTCTGCTTAAAAACTCACTACGGAGGAGAATTAAGTCCTACTTT TAAAGAATTTCTTTATAAAATTTACTGTCTAAGATTAATAGCATTCGAAGATCCCCAGACTTCATAGAATACTCA CTTTTTCACTGACTTTTTTTGTGGGGGGCCGGGGCCGGGGGACTCTGGTATCTAATTCTTTAATGATTCCTATAA ATCTAATGACATTCAATAAAGTTGAGCAAACATTTTACTT

PCT/US2003/028547

FIGURE 1452

ATGGTTTATCAGACATCACTTTGTTCTTGTTCTGTAAACATCCGAGTGCCCAACAGACATTTTGCTGCTGCTACA
AAGTCTGCAAAGAAAACAAAAAAAAGGTGCTAAAGAAAAAACACCAGATGAGAAAAAAAGATGAAAAAAATA
AAAGCATATCCCTATATGGAAGGCGAACCTGAGGATGATGTCTATTTAAAACGCTTATACCCGAGACAGATATAT
GAGGTGGAGAAAGCTGTTCACTTACTTAAGAAATTCCAAATTCTTGACTTTACTAGTCCAAAGCAAAGTGTTTAT
CTTGATTTGACACTGGATATGGCACTGGGAAAGAAAAAACGTGGAGCCATTTACCAGTGTTCTTAGTTTGCCA
TACCCATTTGCTTCCGAAATCAATAAAGTTGCTGTATTTACAGAGAATGCATCAGAGGTCAAAATAGCGGAAGAA
AATGGAGCTGCATTTGCAGGAGGCACTAGTCTGATACAGAAGATTTGGGATGATGAAATTGTTGCAGACTTTTAC
GTAGCTGTTCCAGAAATAATGCCTGAACTTAATCGATTAAGGAAGAAACTGAATAAAAAATATCCAAAGCTTTCT
CGAAATTCCATTGGCCGTGACATCCCCAAAATGCTTGAATTATTTAAAAATGGACATGAAATTAAGGTAGATGAA
GAAAGGGAGAACTTTCTCCAGACCAAAATAGCAACATTGGATATGTCAAGTGACCAGATAGCTGCCAATCTGCAA
GCAGTTATTAATGAAGTTTGTAGGCACAGACCGCTGAATTTGGGTCCCTTTGTGGTACGTGCTTTCCTTCGTAGT
TCAACAAGTGAAGGTTTATTACTGAAGATTGATCCATTGTTGCCTAAAGAAGTAAAAAATGAACAAAGTGAAAAAA
GAAGATGCCTAA

WO 2004/030615 PCT/US2003/028547

1572/6881 FIGURE 1453

GTGGGAAGAGCTGAAGCAGGCGCTCTTGGCTCGGCGCGCCGCTGCAATCCGTAGAGGAACCCGCCGCCGAGCC GAATCGGACCCCTTCGAGGTGCTGAAGGCAGCGGAGAACAAGAAAAAAGAAGCCGGCAGGGGTGGCGTTGGGGGC GTGGCGCTTAAGAAGAAGAATAAGACGAGTTGGAAGAAGACCTGATCAACAACTTCAGGGTGAGGGGAAAATA ATTGATAGAAGACCAGAAAGGCAACCACCTTGTGAACGAAGATTCGAAAAGCCACTTGAAGAAAAGGGTGAAGGA ${\tt GGC} \underline{{\tt TAA}} {\tt TTTCAGTTGATAGACCGATTATTGACCGACCTATTCGAGGTCGTGGTGGTCTTGGAAGAGGTCGAGGG}$ GGCCGTGGACGTGGAATGGGCCGAGGAGATGGATTTGATTCTCGTGGCAAACGTGAATTTGATAGGCATAGTGGA AGTGATAGATCTTCTTTTTCACATTACAGTGGCCTGAAGCACGAGGACAAACGTGGAGGTAGCGGATCTCACAAC CATCATCCAGTGGCAGACACTGAAAATAAGGAGAATGATGTTGAAGAGGTAAAAGAGGGGCCCCAAAAGAGATG ACTTTGGATGAGTGGAAGGCTATTCAAAATAAGGACCGGGCAAAAGTAGAATTTAATATCTGAAAACCAAATGAA GGTGCTGATGGGCAGTGGAAGAAGGGATTTGTTTTCATAAATCAAAGAGTGAAGAGGCTTATGCTGAGGATTCAG TTATGGACCATCATTTCCAGAAGCCAGCAAATGATATAACGTCTCAGCTGGAGATCAATTTTGGAGACCTTGGCC GCCCAGGACGTGGCGGCAGGGAGACAAGGTGGACATGGGCGTGGTGGGCGCCCAAACCGTGGCAGGACCG ACAAGTCAAGTACTTCTGCTCCTGATGTGGATGACCCAGAGGCATTCCCAGTTCTGGCTTAACTGGATGCCATAA GACAACCCTGGTTCCTTCGTGAACCCTTCTGTTCAAAGCTTTTGCATGCTTAAGGATTCCAAATGACAAATTAAA **AAAAAAAAAAGACTGTCATTCATACCATTCACACCTAAAGACTGAATTTTATCTGTTTCAAAAATGAACTTATCT** ${\tt CGCTACACAGAAGTAACAAATATGGTAGTCAGTTTTGTATTTAGAAATGTATTGGTAGCAGGGATGTTTTCATAA}$ TTTTCAGAGATTATGCATTCTTCATGAATACTTTTGTATTGCTGCTTGCAAATATGCATTTCCAAACTTGAAATA CCAATTACAAACTGGTTTTAAAYATTGGACATACTGGCTTTAATACATGCTTTGCATATTCACACATGATCAACT ATACAGAAATATCAGTACTTGAAGAAA

PCT/US2003/028547

1573/6881 FIGURE 1454

MPGHLQEGFGCVVTNRFDQLFDDESDPFEVLKAAENKKKEAGRGGVGGPGAKSAAQAAAQTNSNAAGKQLRKESQ KDRKNPLPRSVGVVDKKEETQPPVALKKEGIRRVGRRPDQQLQGEGKIIDRRPERQPPCERRFEKPLEEKGEGG

PCT/US2003/028547

1574/6881 FIGURE 1455

AGACGCAGTCTCCGTCGTTGACGTTAGTCGCAGTCTTCGCTGCTAACGTTTTGTTATGAGTTGCTAAAATGGTGA AATGCTGCTCCGCCATTGGATGTGCTTCTCGCTGCTTGCCAAATTCGAAGTTAAAAGGACTGACATTTCACGTAT TCCCCACAGATGAAAACATCAAAAGGAAATGGGTATTAGCAATGAAAAGACTTGATGTGAATGCAGCCGGCATTT GGGAGCCTAAAAAAGGAGATGTGTTGTGTTCGAGGCACTTTAAGAAGACAGATTTTGACAGAAGTGCTCCAAATA TTAAACTGAAACCTGGAGTCATACCTTCTATCTTTGATTCTCCATATCACCTACAGGGGAAAAGAGAAAAACTTC GTATTGAAGAATTCCAATCCCAGTTCATTTTTGAACATAGCTACAGTGTAATGGACAGTCCAAAGAAACTTAAGC ATAAATTAGATCATGTGATCGGCGAGCTAGAGGATACAAAGGAAAGTCTACGGAATGTTTTAGACCGAGAAAAAC GTTTTCAGAAATCATTGAGGAAGACAATCAGGGAATTAAAGGATGAATGTCTGATCAGCCAAGAAACAGCAAATA GACTGGACACTTTCTGTTGGGACTGTTGTCAGGAGAGCATAGAACAGGACTATATTTCATGAAATAATTTCATGT TTTAAAGTGCTGCTTTGGATTCTCTGGAGCATTATGCATTATAGTTGTTATCCAAAGACTTTTTTTGAAAATATGC AGAAATTTGTGGTAATTATGTATTTGTGTCTTGTGACAATTATGTTTTATAGACCTACACTAGTGCCAGGTCACT ATTGTAAGATGTTAAAATCTCAAGAAAATTTCACAGAGCTAAAGAAATGATGTCAAATTAGTCACATTAAGCTAT GTACATTGAATTTTACTTTAAATGCATTTTACTACAAAGCACAATTCATTTGTAATGCATATCCATCTTGGATTC AATCCAAGGTGCTTTAGCTATCAGTAGTACCAAAGGATCTTTTTACAAGGCTTCCTGTGGTATTGACTCTGAGAA TAACACATAGTGAAGATCTGTGGGCTTTTAAAATTGTTCACAGCCAATTTAAGAAGACCCCTCATGAAGTCTCAG TTTTCAGTACAGTACATCATTCCTCCTCACTAGGAGCACTTTGATGTAAAACCAGAATAGCTTTAAAAAAGACAAAA AGGATCGTAGATCTGATTTTTAAATGGTTGGTTGCTCTGACAGATCTGAACACTTTGCTTCATGACTATTTCGTC ATAAAGGTATATGTTTAAAATCTGAATGGCAGTACTAGCTCTATACTTTTAATACTGCTTTGTATTTTATATGTA AAGTAGTATTGCTGACATTTTAAAAAAATACAAAATACAAAAGAAACCATTAGAAATTAATAACTGTGGCTCTTC ATTTAGAGAAACGGGTAATTAAAACAGCAGCTTTAGAATAGCTTCTTACTGAATATGCAAAAGAATAATTCCTTG TTATTTCCTAATTGATCCAAGTCTCATAAATTTAGCTTTTGTCATAATTCCTTACCGAAAACAACTGAAATTGAG TGGACCTCATTCAGAAGTCCATGTTGTAGCAGTTAGAATTTGAGTATCAGCCATTTCATTGTAGTAACAAAAATT TGAATTTTTTGTATTTAAGAATTTTCTGTTTTAATGCATGTTATACTTTTATGTAGGATTCCAAACCTTCCCTCT AAATGGGATTTAACCCACATCTGCGAGATCAGCGTTATGCTAAGAGGAAATCACTGAGGCCATATCTTTTTACAA

PCT/US2003/028547

FIGURE 1456

CGGCGCCATTAAAGCGAGGAGGGGGGGGGGGGGGCGCCGCCGCTGGTGCTTATTCTTTTTAGTGCAGCGGGAGAGA GCGGGAGTGTGCGCCGCGAGAGTGGGAGGCGAAGGGGGCAGGCCAGGGAGAGCCCTTTGCAGCCA CTAGTTTCGGTTCGCGGCAGCGGCGGTGTAGTCTCGGCGGCAGCGGCGGAGACACTAGCACTATGTCGGAGGAG GGCACCGAAGGGGGCAGCGCCGAGTCGGAGGGGGGGGGAAGATTGACGCCAGTAAGAACGAGGAGGATGAAGGCCAT TCAAACTCCTCCCCACGACACTCTGAAGCAGCGGCACGGCACGGGAAGAATGTTTATAGGAGGCCTT AGCTGGGACACTACAAAGAAAGATCTGAAGGACTACTTTTCCAAATTTGGTGAAGTTGTAGACTGCACTCTGAAG TTAGATCCTATCACAGGGCGATCAAGGGGTTTTGGCTTTTGTGCTATTTAAAGAATCGGAGAGTGTAGATAAGGTC CCGGTTAAAAAAATTTTTGTTGGTGGCCTTTCTCCAGATACACCTGAAGAGAAAATAAGGGAGTACTTTGGTGGT TTTGGTGAGGTGGAATCCATAGAGCTCCCCATGGACAACAAGACCAATAAGAGGCGTGGGTTCTGCTTTATTACC TTTAAGGAAGAAGAACCAGTGAAGAAGAAATAGGAAAAGAAATACCACAATGTTGGTCTTAGTAAATGTGAAATA AAAGTAGCCATGTCGAAGGAACAATATCAGCAACAGCAACAGTGGGGATCTAGAGGAGGATTTGCAGGAAGAGCT CGTGGAAGAGGTGGTGACCAGCAGAGTGGTTATGGGAAGGTATCCAGGCGAGGTGGTCATCAAAATAGCTACAAA CCATACTAAATTATTCCATTTGCAACTTATCCCCAACAGGTGGTGAAGCAGTATTTTCCAATTTGAAGATTCATT TGAAGGTGGCTCCTGCCACCTGCTAATAGCAGTTCAAACTAAATTTTTTGTATCAAGTCCCTGAATGGAAGTATG ACGTTGGGTCCCTCTGAAGTTTAATTCTGAGTTCTCATTAAAAGAAATTTGCTTTCATTGTTTTATTTCTTAATT GCTATGCTTCAGAATCAATTTGTGTTTTATGCCCTTTCCCCCAGTATTGTAGAGCAAGTCTTGTGTTAAAAGCCC AGTGTGACAGTGTCATGATGTAGTAGTGTCTTACTGGTTTTTTAATAAATCCTTTTGTATAAAAATGTATTGGCT CTTTTATCATCAGAATAGGAAAAATTGTCATGGATTCAAGTTATTAAAAGCATAAGTTTGGAAGACAGGCTTGCC GAAATTGAGGACATGATTAAAATTGCAGTGAAGTTTGAAATGTTTTTAGCAAAATCTAATTTTTTGCCATAATGTG CCATTAAGATTTATATGAATATTTTCCCAAATGCCCAGTTTTTGCTTAATATGTATTGTGCTTTTAGAACAAAT AAATCTGTTAATTATAATAGAAATGCGGCTAGTTCAGAGAGATTTTTAGAGCTGTGGTGGACTTCATAGATGAAT TCAAGTGTTGAGGGAGGATTAAAGAAAT

WO 2004/030615 PCT/US2003/028547

1576/6881 FIGURE 1457A

GACGAGCGCTGCACTAACGCAGGATCCGGCTGCCGAAGGTCCTCGCCAGCAGG<u>ATG</u>AAGTTAAAGGAAGTAGATC GTACAGCCATGCAGGCATGGAGCCCTGCCCAGAATCACCCCATTTACCTAGCAACAGGAACATCTGCTCAGCAAT AATCTTGTGCCACATTCTCCTCTTCTCACAGGTACCACAAGTTGATTTGGGGGGCCTTATAAAATGGATTCCAAAG GAGATGTCTCTGGAGTTCTGATTGCAGGTGGTGAAAATGGAAATATTATTCTCTATGATCCTTCTAAAATTATAG CTGGAGACAAGGAAGTTGTGATTGCCCAGAATGACAAGCATACTGGCCCAGTGAGAGCCTTGGATGTGAACATTT TCCAGACTAATCTGGTAGCTTCTGGTGCTAATGAATCTGAAATCTACATATGGGATCTAAATAATTTTGCAACCC CAATGACACCAGGAGCCAAAACACAGCCGCCAGAAGATATCAGCTGCATTGCATGGAACAGACAAGTTCAGCATA TTTTAGCATCAGCCAGTCCCAGTGGCCGGCCACTGTATGGGATCTTAGAAAAAATGAGCCAATCATCAAAGTCA GTGACCATAGTAACAGAATGCATTGTTCTGGGTTGGCATGGCATCCTGATGTTGCTACTCAGATGGTCCTTGCCT CCGAGGATGACCGGTTACCAGTGATCCAGATGTGGGATCTTCGATTTGCTTCCTCTCCACTTCGTGTCCTGGAAA ACCATGCCAGGGGGATTTTGGCAATTGCTTGGAGCATGGCAGATCCTGAATTGTTACTGAGCTGTGGAAAAGATG CTAAGATTCTCTGCTCCAATCCAAACACAGGAGGGGTGTTATATGAACTTCCCACCAACACACAGTGGTGCTTCG ATATTCAGTGGTGTCCCCGAAATCCTGCTGTCTTATCAGCTGCTTCGTTTGATGGGCGTATCAGTGTTTATTCTA TCATGGGAGGAAGCACAGATGGTTTAAGACAGAAACAAGTTGACAAGCTTTCATCATCTTTTGGGAATCTTGATC CCTTTGGCACAGGACAGCCCCTTCCTCCGTTACAAATTCCACAGCAGACTGCTCAGCATAGTATAGTGCTGCCTC TGAAGAAGCCGCCCAAGTGGATTCGAAGGCCTGTTGGTGCTTCTTTTTCATTTGGAGGCAAACTGGTTACGTTTG AGAATGTCAGAATGCCTTCTCATCAGGGAGCTGAGCAGCAGCAGCAGCACCATGTGTTCATTAGTCAGGTTG TAACAGAAAAGGAGTTCCTCAGCCGATCAGACCAACTTCAGCAGGCTGTGCAGTCACAAGGATTTATCAATTATT GCCAAAAAAAAATTGATGCTTCTCAGACTGAATTTGAGAAAAATGTGTGGTCCTTTTTGAAGGTAAACTTTGAGG ATGATTCTCGTGGAAAATACCTTGAACTTCTAGGATACAGAAAAGAAGATCTAGGAAAGAAGATTGCTTTGGCCT TGAACAAAGTGGATGGAGCCAATGTGGCTCTTAAAGACTCTGACCAAGTAGCACAGAGTGATGGGGAGGAGAGCC CTGCTGCTGAAGAGCAGCTCTTGGGAGAGCACATTAAAGAGGAAAAAGAAGAATCTGAATTTCTACCCTCATCTG · GAGGAACATTTAATATCTCTGTCAGTGGGGACATTGATGGTTTAATTACTCAGGCTTTGCTGACGGGCAATTTTG AGAGTGCTGTTGACCTTTGTTTACATGATAACCGCATGGCCGATGCCATTATATTGGCCATAGCAGGTGGACAAG AACTCTTGGCTCGAACCCAGAAAAATACTTCGCAAAATCCCAAAGCAAAATTACCAGGCTCATCACTGCAGTGG TGATGAAGAACTGGAAAGAGATTGTTGAGTCTTGTGATCTTAAAAATTGGAGAGAGGCTTTAGCTGCAGTATTGA CTTATGCAAAGCCGGATGAATTTTCAGCCCTTTGTGATCTTTTGGGAACCAGGCTTGAAAATGAAGGAGATAGCC TCCTGCAGACTCAAGCATGTCTCTGCTATATTTGTGCAGGGAATGTAGAGAAATTAGTTGCATGTTGGACTAAAG CTCAAGATGGAAGCCACCCTTTGTCACTTCAGGATCTGATTGAGAAAGTTGTCATCCTGCGAAAAGCTGTGCAAC TCACTCAAGCCATGGACACTAGTACTGTAGGAGTTCTCTTGGCTGCGAAGATGAGTCAGTATGCCAATTTGTTGG GTGACAGACTTTGTAGAGCACAAGGAGAGCCTGTAGCAGGACATGAATCACCTAAAATTCCGTACGAGAAACAGC AGCTCCCCAAGGGCAGGCCTGGACCAGTTGCTGGCCACCACCAGATGCCAAGAGTTCAAACTCAACAATATTATC CCCATGGAGAAAATCCTCCACCTCCGGGTTTCATAATGCATGGAAATGTTAATCCAAATGCTTCTGGTCAGCTTC CCACATCTCCAGGTCATATGCACACCCAGGTACCACCTTATCCACAGCCACAGCCTTATCAACCAGCCCAGCCGT ATCCCTTCGGAACAGGGGGGTCAGCAATGTATCGACCTCAGCAGCCTGTTGCTCCTCCTACTTCAAACGCTTACC CTAACACCCCTTACATATCTTCTGCTTCTTCCTATACTGGGCAGTCTCAGCTGTACGCAGCACCAGCACCAGGCCT CTTCACCTACCTCCAGCCCTGCTACTTCTTTCCCTCCTCCCCCTTCCTCTGGAGCATCCTTCCAGCATGGCGGAC TGCCTGCGTCCCAAAGAACAGGTCCTCAGAATGGTTGGAATGACCCTCCAGCTTTGAACAGAGTACCCAAAAAGA AGAAGATGCCTGAAAACTTCATGCCTCCTGTTCCCATCACATCACCAATCATGAACCCGTTGGGTGACCCCCAGT CACAAATGCTGCAGCAACAGCCTTCAGCTCCAGTACCACTGTCAAGCCAGTCTTCATTCCCACAGCCACATCTTC CAGGTGGCCAGCCCTTCCATGGCGTACAGCAACCTCTTGGTCAAACAGGCATGCCACCATCTTTTTCAAAGCCCA CCAAGAAACCTATTCCAGATGAGCACCTCATTCTAAAGACCACATTTGAGGATCTTATTCAGCGCTGCCTTTCTT CAGCAACAGACCCTCAAACCAAGAGGAAGCTAGATGATGCCAGCAAACGTTTGGAGTTTCTGTATGATAAACTTA GGGAACAGACACTTTCACCAACAATCACCAGTGGTTTACACAACATTGCAAGGAGCATTGAAACTCGAAACTACT

PCT/US2003/028547

FIGURE 1457B

PCT/US2003/028547

1578/6881 FIGURE 1458

 ${\tt MKLKEVDRTAMQAWSPAQNHPIYLATGTSAQQLDATFSTNASLEIFELDLSDPSLDMKSCATFSSSHRYHKLIWG}$ PYKMDSKGDVSGVLIAGGENGNIILYDPSKIIAGDKEVVIAQNDKHTGPVRALDVNIFQTNLVASGANESEIYIW DLNNFATPMTPGAKTQPPEDISCIAWNRQVQHILASASPSGRATVWDLRKNEPIIKVSDHSNRMHCSGLAWHPDV ATQMVLASEDDRLPVIQMWDLRFASSPLRVLENHARGILAIAWSMADPELLLSCGKDAKILCSNPNTGEVLYELP TNTQWCFDIQWCPRNPAVLSAASFDGRISVYSIMGGSTDGLRQKQVDKLSSSFGNLDPFGTGQPLPPLQIPQQTA QHSIVLPLKKPPKWIRRPVGASFSFGGKLVTFENVRMPSHQGAEQQQQQHHVFISQVVTEKEFLSRSDQLQQAVQ SQGFINYCQKKIDASQTEFEKNVWSFLKVNFEDDSRGKYLELLGYRKEDLGKKIALALNKVDGANVALKDSDQVA QSDGEESPAAEEQLLGEHIKEEKEESEFLPSSGGTFNISVSGDIDGLITQALLTGNFESAVDLCLHDNRMADAII LAIAGGQELLARTQKKYFAKSQSKITRLITAVVMKNWKEIVESCDLKNWREALAAVLTYAKPDEFSALCDLLGTR LENEGDSLLQTQACLCYICAGNVEKLVACWTKAQDGSHPLSLQDLIEKVVILRKAVQLTQAMDTSTVGVLLAAKM SQYANLLAAQGSIAAALAFLPDNTNQPNIMQLRDRLCRAQGEPVAGHESPKIPYEKQQLPKGRPGPVAGHHQMPR VQTQQYYPHGENPPPPGFIMHGNVNPNASGQLPTSPGHMHTQVPPYPQPQPYQPAQPYPFGTGGSAMYRPQQPVA PPTSNAYPNTPYISSASSYTGQSQLYAAQHQASSPTSSPATSFPPPPSSGASFQHGGPGAPPSSSAYALPPGTTG ${\tt TLPAASELPASQRTGPQNGWNDPPALNRVPKKKKMPENFMPPVPITSPIMNPLGDPQSQMLQQQPSAPVPLSSQS}$ SFPQPHLPGGQPFHGVQQPLGQTGMPPSFSKPNIEGAPGAPIGNTFQHVQSLPTKKITKKPIPDEHLILKTTFED LIQRCLSSATDPQTKRKLDDASKRLEFLYDKLREQTLSPTITSGLHNIARSIETRNYSEGLTMHTHIVSTSNFSE TSAFMPVLKVVLTQANKLGV

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WO 2004/030615

PCT/US2003/028547

1579/6881 FIGURE 1459

GCAGAGCACAGCATCGTCGGGACCAGACTCGTCTCAGGCCAGTTGCAGCCTTCTCAGCCAAACGCCGACCAAGGA ${\tt AAACTCACTACC} \underline{\textbf{ATG}} \\ {\tt AGAATTGCAGTGATTTGCTTTTGCCTCCTAGGCATCACCTGTGCCATACCAGTTAAACAG} \\$ GCTGATTCTGGAAGTTCTGAGGAAAAGCAGCTTTACAACAAATACCCAGATGCTGTGGCCACATGGCTAAACCCT GATGATATGGATGATGAAGATGATGACCATGTGGACAGCCAGGACTCCATTGACTCGAACGACTCTGATGAT GTAGATGACACTGATGATTCTCACCAGTCTGATGAGTCTCACCATTCTGATGAATCTGATGAACTGGTCACTGAT TTTCCCACGGACCTGCCAGCAACCGAAGTTTTCACTCCAGTTGTCCCCACAGTAGACACATATGATGGCCGAGGT GATAGTGTGGTTTATGGACTGAGGTCAAAATCTAAGAAGTTTCGCAGACCTGACATCCAGTACCCTGATGCTACA GACGAGGACATCACCTCACACATGGAAAGCGAGGAGTTGAATGGTGCATACAAGGCCATCCCCGTTGCCCAGGAC CTGAACGCGCCTTCTGATTGGGACAGCCGTGGGAAGGACAGTTATGAAACGAGTCAGCTGGATGACCAGAGTGCT GAAACCCACAGCCACAAGCAGTCCAGATTATATAAGCGGAAAGCCAATGATGAGAGCAATGAGCATTCCGATGTG ATTGATAGTCAGGAACTTTCCAAAGTCAGCCGTGAATTCCACAGCCATGAATTTCACAGCCATGAAGATATGCTG GTTGTAGACCCCAAAAGTAAGGAAGAAGATAAACACCTGAAATTTCGTATTTCTCATGAATTAGATAGTGCATCT TCTGAGGTCAATTAAAAGGAGAAAAAATACAATTTCTCACTTTGCATTTAGTCAAAAGAAAAAATGCTTTATAGC AAAATGAAAGAGAACATGAAATGCTTCTTTCTCAGTTTATTGGTTGAATGTGTATCTATTTGAGTCTGGAAATAA CTAATGTGTTTGATAATTAGTTTAGTTTGTGGCTTCATGGAAACTCCCTGTAAACTAAAAGCTTCAGGGTTATGT CTATGTTCATTCTATAGAAGAAATGCAAACTATCACTGTATTTTAATATTTTGTTATTCTCTCATGAATAGAAATT TATGTAGAAGCAAACAAAATACTTTTACCCACTTAAAAAGAGAATATAACATTTTATGTCACTATAATCTTTTGT TTTTTAAGTTAGTGTATATTTTGTTGTGATTATCTTTTTTGTGGTGTGAATAAATCTTTTATCTTGAATGTAATAA GAATTTGGTGGTGTCAATTGCTTATTTGTTTTCCCACGGTTGTCCAGCAATTAATAAAACATAACCTTTTTTACT **GCCTAAAAAAAAAAAAAAAAAA**

PCT/US2003/028547

1580/6881 FIGURE 1460

MRIAVICFCLLGITCAIPVKQADSGSSEEKQLYNKYPDAVATWLNPDPSQKQNLLAPQTLPSKSNESHDHMDDMD DEDDDDHVDSQDSIDSNDSDDVDDTDDSHQSDESHHSDESDELVTDFPTDLPATEVFTPVVPTVDTYDGRGDSVV YGLRSKSKKFRRPDIQYPDATDEDITSHMESEELNGAYKAÍPVAQDLNAPSDWDSRGKDSYETSQLDDQSAETHS HKQSRLYKRKANDESNEHSDVIDSQELSKVSREFHSHEFHSHEDMLVVDPKSKEEDKHLKFRISHELDSASSEVN

WO 2004/030615 PCT/US2003/028547

1581/6881 FIGURE 1461

CTTTTCAAGATGCCTGAGGAAGTGCACCATGGAGAGGAGGAGGTGGAGACTTTTGCCTTTCAGGCAGAAATTGCC CAACTCATATCCCTCATCATCAATACCTTCTATTCCAACGAGGAGATTTTCCTTCAGGAGTTGATCTCTAATGCT TCTGATGCCTTGGACAAGATTCGCTATGAGAGCCTGACAGACCCTTCAAAGTTGGACAGTGGTAAAGAGCTGAAA ATTGACATCATCCCCAACCCTCAGGAACGTACCCTGGCTTTGGTAGACACAGGCATTGGCATGACCAAAGCTGAT ATCTCCATGATTGGGCAGTTTGGTGTTGGCTTTTTTCTGCCTACCTGGTGGCAGAGAAACTGGTTGTGATCACAA AGCACAACGATGATGAACAGTATGCTTGGGAGGTCTTCTGCTGGAGGTTCCTTCACTGTGCATGCTGATCATGGTG TCAAAGAAGTAGTGAAGAAGCATTCTCAGTTCATAGGCTATCCCATCACCCTTTATTTGGAGAAGGAACAAGACA AGGAAATTAGTGATGATGAGGCAGAAGAAGAAGAAGATGAGAAAGATGACGAAGAAAAGATGACGAAGAAAAGC CCAAGATCAAAGATGTGGGTTCAGATGAGGAGGATGACAGCAGTAAGGATAAGAAGAAGAAAACTAAGAAGATCA AAGAGAAATACATTGACTAGGAAGAACTAAACAAGACCAAGCCTATTTGGACCAGAAACCATGATGACATCACCC AAGAGGAGTATGGAGAATTCTATAAGAGCCTCACCAGTGACTGGGAAGACCACTTGGCAGTCAAGCACTTTTCTG TAGAAGGTCAGTTGGAATTCAGGGCATTGCTATTCAGTCCTCGTCGGGCTCCCTTTGACCTTTTTGAGAACAAGA AGAAAAAGAACAACATCAAACTGTATGTCCGCCGTGTGTTCATCATGGACAGCTGTGATGAGTTGATACCAGAGT ATCTCAATTTTATCCATGGTGTGGTTGACTCTGAGGATCTGCCCCTGAACATCTCCCGAGAAATGCTCCAGCAGA GCAAAATCTTGAAAGTCATTCGCAAAAACATTGTTAAGAAGTGCCTTGAGCTCTTCTCTGAGCTGGCAGAAGACA AGGAGATTATAAGAAATTCTATGAGGCATTTTCTAAAAATCTCAAGCTTGGAATCCACGAAGACTCCACTAACCG $\verb|CCACCGCCTGTCTGAGCTGCTGCGCTGTCACACCTCCCAGTCTGGAGATGAGATGACATCTCTGTCGTAGTATGT|\\$ TTCTCACATGAAGGAGACACAGAAGTCCACCTATTACATCACTGGTGAGAGCAAGGAGCAGGTGGCCAACTCTGC TTTTGTGGAGCGAGTGCGGAAACAGGGCTTCGAGGTGGTATATATGACTGAGCCCATTGACGAGTACTGTGTGCA GCAGCTCAAGGAGTTTGATGGGAAAAGCCTGGTCTCAGTTACCAAGGAGGGTCTGGAGCTACCTGAGGATGAGGA GAAGGTTGAGAAGGTGACAATCTCCAATAGACTTGTGTCTTCACCCTGCTGCATTGTGACCAGCACCTACGGCTG GACAGCCAATATGGAGCAGATCATGAAAGCCCAGGCACTTCGGGACAACTCCACCATGGGCTATATGATGGCCAA AAAGCACCTGGAGATCAACCCCGACCACCCCATCATGGAGACGCTGCGGCAGAAGGCTGAGGCCGACAAGAATGA TAAGGCAGTTAAGGACCTGGTGGTGCTGCTTTTGAAACCGCCCTGCTATCTTCGGGCCTTTTCCCTTGAGGATCC CCAGACCACTCCAACCACATCTACCACATGATCAAGCTAGGTCTAGGTACTGATGAAGATGAAGTGGCAGCAGA GGAACCCAGTGATGCAGTTCCTGATGAGATCCCCCCTCTTGAGGGTGATGAGGATGCGTCTCGCATGGAAGAAGT $\texttt{CGAT} \underline{\textbf{TAG}} \texttt{GAGTTCATAGTTGGAAAACTTGTGCCCTTGTATAGTGTCCCCATGGCTCCCACTGCAGCCTCGAGTGC}$ CCCTGTCCCACCTGGCTGCTGGTGTCTAGTGTTTTTTCCCTCTCCTGTCCTTGTGTTGAAGGCAGGAAACCAAG GGTGTCAAGCCCCATTCCCTCTACTCTTGACAGCAGGATTGGATGTTGTGTATTTGTGTTATTTTATTTTCT TCATTTGTTCTGAAATTAAAGAATGTAAAATAAAGAATATGCCGTTTTTATAC

PCT/US2003/028547

1582/6881 FIGURE 1462

MKETQKSTYYITGESKEQVANSAFVERVRKQGFEVVYMTEPIDEYCVQQLKEFDGKSLVSVTKEGLELPEDEEEK KKMEESKEKFENLCKLMKEILDKKVEKVTISNRLVSSPCCIVTSTYGWTANMEQIMKAQALRDNSTMGYMMAKKH LEINPDHPIMETLRQKAEADKNDKAVKDLVVLLFETALLSSGFSLEDPQTHSNHIYHMIKLGLGTDEDEVAAEEP SDAVPDEIPPLEGDEDASRMEEVD

PCT/US2003/028547

1583/6881 FIGURE 1463

PCT/US2003/028547

1584/6881 FIGURE 1464

GAGCAGCAGAATTTCAACTCCAGTAGACTTGAATATGCCTCTGGGCAAAGAAGCAGAGCTAACGAGGAAAGGGAT TCTGCAGTGGCTCTGGGTCCAGCCCCTTACTTAAAGATCTGGAAAGCATGAAGACTGGGCTTTTTTTCCTATGTC TCTTGGGAACTGCAGCTGCAATCCCGACAAATGCAAGATTATTATCTGATCATTCCAAACCAACTGCTGAAACGG TAGCACCTGACAACACTGCAATCCCCAGTTTAAGGGCTGAAGCTGAAGAAAATGAAAAAGAAACAGCAGTATCCA CAGAAGACGATTCCCACCATAAGGCTGAAAAATCATCAGTACTAAAGTCAAAAGAGGAAAGCCATGAACAGTCAG CAGAACAGGGCAAGAGTTCTAGCCAAGAGCTGGGATTGAAGGATCAAGAGGACAGTGATGGTCACTTAAGTGTGA CAGAGAACACTGATTTTTTGGCTCCTGGTGTTAGTTCCTTCACAGATTCTAACCAACAAGAAAGTATCACAAAGA GAGAGGAAAACCAAGAACAACCTAGAAATTATTCACATCATCAGTTGAACAGGAGCAGTAAACATAGCCAAGGCC TAAGGGATCAAGGAAACCAAGAGCAGGATCCAAATATTTCCAATGGAGAAGAAGAAGAAGAAAAAGAGCCAGGTG AATTTGATCAGGGTAACCAAGAACAAGAAGATAACTCCAATGCAGAAATGGAAGAGGAAAATGCATCGAACGTCA ATAAGCACATTCAAGAAACTGAATGGCAGAGTCAAGAGGGTAAAACTGGCCTAGAAGCTATCAGCAACCACAAAG AGACAGAAAAAGACTGTTTCTGAGGCTCTGCTCATGGAACCTACTGATGGTAATACCACGCCCAGAAATC ATGGAGTTGATGATGGCGATGATGGCGATGATGGCGCACTGATGGCCCCAGGCACAGTGCAAGTGATG ACTACTTCATCCCAAGCCAGGCCTTTCTGGAGGCCGAGAGAGCTCAATCCATTGCCTATCACCTCAAAATTGAGG AGCAAAGAGAAAAAGTACATGAAAATGAAAATATAGGTACCACTGAGCCTGGAGAGCACCAAGAAGGCCAAGAAAG CAGAGAACTCATCAAATGAGGAGGAAACGTCAAGTGAAGGCAACATGAGGGTGCATGCTGTGGATTCTTGCATGA GCTTCCAGTGTAAAAGAGGCCACATCTGTAAGGCAGACCAACAGGGAAAACCTCACTGTGTCTGCCAGGATCCAG TGACTTGTCCTCCAACAAAACCCCTTGATCAAGTTTGTGGCACTGACAATCAGACCTATGCTAGTTCCTGTCATC TATTCGCTACTAAATGCAGACTGGAGGGGACCAAAAAGGGGCATCAACTCCAGCTGGATTATTTTGGAGCCTGCA AATCTATTCCTACTGTACGGACTTTGAAGTGATTCAGTTTCCTCTACGGATGAGAGACTGGCTCAAGAATATCC TCATGCAGCTTTATGAAGCCAACTCTGAACACGCTGGTTATCTAAATGAGAAGCAGAGAAATAAAGTCAAGAAAA TTTACCTGGATGAAAAGAGGCTTTTGGCTGGGGACCATCCCATTGATCTTCTCTTAAGGGACTTTAAGAAAAACT ACCACATGTATGTGTATCCTGTGCACTGGCAGTTTAGTGAACTTGACCAACACCCTATGGATAGAGTCTTGACAC ATTCTGAACTTGCTCCTCTGCGAGCATCTCTGGTGCCCATGGAACACTGCATAACCCGTTTCTTTGAGGAGTGTG ACCCCAACAAGGATAAGCACATCACCCTGAAGGAGTGGGGCCACTGCTTTGGAATTAAAGAAGAGGACATAGATG AAAATCTCTTGTTTTGAACGAAGATTTTAAAGAACTCAACTTTCCAGCATCCTCTCTTGTTCTAACCACTTCAGA AATATATGCAGCTGTGATACTTGTAGATTTATATTTAGCAAAATGTTAGCATGTATGACAAGACAATGAGAGTAA TTGCTTGACAACAACCTATGCACCAGGTATTTAACATTAACTTTGGAAACAAAAATGTACAATTAAGTAAAGTCA ACATATGCAAAATACTGTACATTGTGAACAGAAGTTTAATTCATAGTAATTTCACTCTGCATTGACTTATGAG ATAATTAATGATTAAACTATTAATGATAAAAATAATGCATTTGTATTGTTCATAATATCATGTGCACTTCAAGAA AATGGAATGCTACTCTTTTGTGGTTTACGTGTATTATTTTCAATATCTTAATACCCTAATAAAGAGTCCATAAAA ATCC

PCT/US2003/028547

1585/6881 FIGURE 1465

PCT/US2003/028547

1586/6881 FIGURE 1466

PCT/US2003/028547

1587/6881 FIGURE 1467

 $\tt METLYRVPFLVLECPNLKLKKPPWLHMPSAMTVYALVVVSYFLITGGIIYDVIVEPPSVGSMTDEHGHQRPVAFLAYRVNGQYIMEGLASSFLFTMGGLGFIILDRSNAPNIPKLNRFLLLFIGFVCVLLSFFMARVFMRMKLPGYLMG$

PCT/US2003/028547

FIGURE 1468

ATGCCCCAACTCTCCGGAGGAGGTGGCGGCGGGGGGGGGACCCGGAACTCTGCGCCACGGACGATGATCCCC TTCAAGGACGAGGCGATCCTCAGAAGGAAAAGATCTTCGCCGAGATCAGTCATCCCGAAGAGGAAGGCGATTTA GCTGACATCAAGTCTTCCTTGGTGAACGAGTCTGAAATCATCCCGGCCAGCAACGGACACGAGGTGGCCAGACAA GCACAAACCTCTCAGGAGCCCTACCACGACAAGGCCAGAGAACACCCCGATGACGGAAAGCATCCAGATGGAGGC CTCTACAACAAGGGACCCTCCTACTCGAGTTATTCCGGGTACATAATGATGCCAAATATGAATAACGACCCATAC ATGTCAAATGGATCTCTTTCTCCACCCATCCCGAGAACATCAAATAAAGTGCCCGTGGTGCAGCCATCCCATGCG GTCCATCCTCTCACCCCCTCATCACTTACAGTGACGAGCACTTTTCTCCAGGATCACACCCGTCACACATCCCA TCAGATGTCAACTCCAAACAAGGCATGTCCAGACATCCTCCAGCTCCTGATATCCCTACTTTTTATCCCTTGTCT AGGCAACCCTACCCATCCTCACTGTCAGTCGACACTTCCATGTCCAGGTTTTCCCATCATATGATTCCCGGTCCT CCTGGTCCCCACACTGGCATCCCTCATCCAGCTATTGTAACACCTCAGGTCAAACAGGAACATCCCCACACT GACAGTGACCTAATGCACGTGAAGCCTCAGCATGAACAGAGAAGGAGCAGGAGCCAAAAAGACCTCACATTAAG AAGCCTCTGAATGCTTTTATGTTATACATGAAAGAAATGAGAGCGAATGTCGTTGCTGAGTGTACTCTAAAAGAA AGTGCAGCTATCAACCAGATTCTTGGCAGAAGGTGGCATGCCCTCTCCCGTGAAGAGCAGGCTAAATATTATGAA TTAGCACGGAAAGAAAGACAGCTACATATGCAGCTTTATCCAGGCTGGTCTGCAAGAGACAATTATGGTAAGAAA AAGAAGAGGAAGAGAGAAACTACAGGAATCTGCATCAGGTACAGGTCCAAGAATGACAGCTGCCTACATCTGA

PCT/US2003/028547

FIGURE 1469

PCT/US2003/028547

1590/6881 FIGURE 1470

PCT/US2003/028547

1591/6881 FIGURE 1471

PCT/US2003/028547

1592/6881 FIGURE 1472

GTGAACATGGTATCACCATTGATATCTCTTTGTGGAAATTTGAGACCAGCAAGTACTATGTGACTATCATTGATG
CCCCAGGACACAGAGACCTCATCAAAAACATGATTACAGGGACATCTCAGGCTGACTGTGCTGTCTTGATTGTTG
CTGCTGGTTTTGGTGAATTTGAAGCTGGTATCTCCAAGAATGGGCAGACCCGAGAGCACGCCCTTCTGGCTTACA
CACTGGGTGTGAAACAACTAATTGTTGGTGTTAACAAAATGGATTCCACTGAGCCACCCTACAGCCATAAGAGAT
ATGAGGAAATTGTTAAGGAAGTCAGCACTTACATTAAGAAAATTGGCCACAACACCGACACAGTAGCATTTGTGC
CAGTTTCTGGTTGGAATGGTGACAACACGCTGGAGCCAAGTGCTAACATGCCTTGGTTCAAGGGATGGAAAGTCA
CCCGTAAGGATGGCAATGCCAGTGGAACCAGCCTGCCTCTCCAGGATGTCTACAAAATTGGTGGTATTGGTACTG
TTCCTGTTGGCTGAGTGGAGACTGGTGTTCTCAAACCTGGTATGGTGGTCACCTTTGCTCCAGTCAACGTTGCAA
CAGAAGTAAAATCTGTTGAAATGCACCATGAAGCTTTGAGTGAAGTTCTTCCTGGGGACAATGTGGGCTTCAATG
TCAAGAATGTGTCTGTCAAGGATGTTCGTCGTGGCCAACGTTGCTGGTGACAGCAAAAAAGGACCCACCAATGGAAG
CAGCTGGCTTCACTGCTCAGGTGATTATCCTGAACCATCCAGGCCAAATAA

PCT/US2003/028547

FIGURE 1473

GAAAAATTTGAGAAGGAGGCTGCTGAGATGGGAAAGTGCTCCTTCAAGTATGCCTGGGTCTTGGATAAACTGAAA
GCTGAGCGTGAACATGGTATCACCATTGATATCTCTTTGTGGAAATTTGAGACCAGCAAGTACTATGTGACTATC
ATTGATGCCCCAGGACACAGAGACCTCATCAAAAACATGATTACAGGGACATCTCAGGCTGACTGTGCTGTCTTG
ATTGTTGCTGCTGGTTTTGGTGAATTTGAAGCTGGTATCTCCAAGAATGGGCAGACCCGAGAGCACGCCCTTCTG
GCTTACACACTGGGTGTGAAACAACTAATTGTTGGTGTTAACAAAATGGATTCCACTGAGCCACCCTACAGCCAT
AAGAGATATGAGGAAATTGTTAAGGAAGTCAGCACTTACATTAAGAAAATTGGCCACAACACCGACACAGTAGCA
TTTGTGCCAGTTTCTGGTTGGAATGGTGACAACACGCTGGAGCCAAGTGCTAACATGCCTTGGTTCAAGGGATGG
AAAGTCACCCGTAAGGATGGCAATGCCAGTGGAACCACGCTGCTTGAGGGCTCTTGACTGCATCCTACCACCAACT
CGTCCAACTGACAAGCCCTTGTGCCTGCCTCTCCAGGATGTCTACAAAATTGGTGGTATTGGTACTGTTCCTGTT
GGCTGAGTGGAGACTGGTGTTCTCAAACCTGGTATGGTGGTCACCTTTGCTCCAGTCAACGTTGCAACAGAAGTA
AAATCTGTGTCAAGGATGTTCGTCGTGGCAACGTTGCTGGTGACAGCAAAAAAGGACCCACCAATGGAAGCAG

PCT/US2003/028547

1594/6881 FIGURE 1474A

TGCAGTGATTGTGATTCTCATCCTGGTGTGGGAAGGAATCCCGCTGTCTCTGGCTGACAAACTCTACTCGGAGCT TCAGGGGCTGGATCCAGAAACCTGTGGTGCCTCCTTCTCTTTTGGTTGTTCATGGAGCATGTACTACAATGGATG TAAGTTTGCCAGAAGCAAGATCCCAAGGAAGTTTAAGCTGCTTGGGGATGACCCAAAAGAGGGAAGAGAAACTGGA GTCTCATTTGCAAAACCTGTCCACTCTTATGGCACCAACATATAAGAAACTTGCACCTGATGCATATAATAATCA ATGTTTGGACTTCTGTGCTCATGCCCACAGAGACTTGCACAACATGCAGAATGGCAGCACATTGGTATGCACTCT CACTAGAGAAGACAATCGAGAATTTGGAGGAAAACCTGAGGATGAGCAGCTTCACGTTCTGCCTTTATACAAAGT CTCTGACGTGGATGAGTTTGGGAGTGTGGAAGCTCAGGAGGAGAAAAAACGGAGTGGTGCCATTCAGGTACTGAG TTCTTTTCGGCGAAAAGTCAGGATGTTAGCAGAGCCAGTCAAGACTTGCCGACAAAGGAAACTAGAAGCCAAGAA AGCTGCAGCTGAAAAGCTTTCCTCCCTGGAGAACAGCTCAAATAAAAATGAAAAGGAAAAGTCAGCCCCATCACG TACAAAACAAACTGAAAACGCAAGCCAGGCTAAACAGTTGGCAGAACTTTTGCGACTTTCAGGACCAGTCATGCA GCCACATCACCCTCAGACAGAGTCTGTCAACTCTTATTCTGCTTCTGGATCCACCAATCCATACATGAGACGGCC CAATCCAGTTAGTCCTTATCCAAACTCTTCACACACTTCAGATATCTATGGAAGCACCAGCCCTATGAACTTCTA TTCCACCTCATCTCAAGCTGCAGGTTCATATTTGAATTCTTCTAATCCCATGAACCCTTACCCTGGGCTTTTGAA TCAGAATACCCAATATCCATCATATCAATGCAATGGAAACCTATCAGTGGACAACTGCTCCCCATATCTGGGTTC CTATTCTCCCCAGTCTCAGCCGATGGATCTGTATAGGTATCCAAGCCAAGACCCTCTGTCTAAGCTCAGTCTACC ACCCATCCATACACTTTACCAGCCAAGGTTTGGAAATAGCCAGAGTTTTACATCTAAATACTTAGGTTATGGAAA CCAAAATATGCAGGGAGATGGTTTCAGCAGTTGTACCATTAGACCAAATGTACATCATGTAGGGAAATTGCCTCC TTATCCCACTCATGAGATGGATGGCCACTTCATGGGAGCCACCTCTAGATTACCACCCAATCTGAGCAATCCAAA CATGGACTATAAAAATGGTGAACATCATTCACCTTCTCACATAATCCATAACTACAGTGCAGCTCCGGGCATGTT CAACAGCTCTCTTCATGCCCTGCATCTCCAAAACAAGGAGAATGACATGCTTTCCCACACAGCTAAIGGGTTATC AAAGATGCTTCCAGCTCTTAACCATGATAGAACTGCTTGTGTCCAAGGAGGCTTACACAAATTAAGTGATGCTAA TGGTCAGGAAAAGCAGCCATTGGCACTAGTCCAGGGTGTGGCTTCTGGTGCAGAGGACAACGATGAGGTCTGGTC AGACAGCGAGCAGAGCTTTCTGGATCCTGACATTGGGGGGAGTGGCCGTGGCTCCAACTCATGGGTCAATTCTCAT TGAGTGTGCAAAGCGTGAGCTGCATGCCACAACCCCTTTAAAGAATCCCAATAGGAATCACCCCACCAGGATCTC CCTCGTCTTTTACCAGCATAAGAGCATGAATGAGCCAAAACATGGCTTGGCTCTTTGGGAAGCCAAAATGGCTGA AAAAGCCCGTGAGAAAGAGGAAGAGTGTGAAAAGTATGGCCCAGACTATGTGCCTCAGAAATCCCATGGCAAAAA AGTGAAACGGGAGCCTGCTGAGCCACATGAAACTTCAGAGCCCACTTACCTGCGTTTCATCAAGTCTCTTGCCGA AAGGACCATGTCCGTGACCACAGACTCCACAGTAACTACATCTCCATATGCCTTCACTCGGGTCACAGGGCCTTA ATAGTTCTCATGACGTGGGCAGTGGGGAAAGGTCACAGTATTCATGACAAATGTGGTGGGAAAAACCTCAGCTCA CCAGCAACAAAAGAGGTTATCTTACCATAGCACTTAATTTTCACTGGCTCCCAAGTGGTCACAGATGGCATCTAG GAAAAGACCAAAGCATTCTATGCAAAAAGAAGGTGGGGAAGAAAGTGTTCCGCAATTTACATTTTTAAACACTGG TTTAATAATATCAAGTTTGCATAGTCATGGAACACAAATCAAACAAGTACTGTAGTATTACAGTGACAGGAATCT TAAAATACCATCTGGTGCTGAATATATGATGTACTGAAATACTGGAATTATGGCTTTTTGAAATGCAGTTTTTAC GTTCTAAGAAATGGTGCTAAGAAAATGGTGTCTTTAATAGCTAAAAATTTAATGCCTTTATATCATCAAGATGCT CACAAGCTTAGTTTTTAAAATGTGGACATTTTAAAGGCCTCTGGATTTTGCTCATCCAGTGAAGTCCTTGTAGGA CAATAAACGTATATATGTACATATATACACAAACATGTATATGTGCACACACGTGTATATGTATAAATATTTTAA ATGGTGTTTTAGAAGCACTTTGTCTACCTAAGCTTTGACAACTTGAACAATGCTAAGGTACTGAGATGTTTAAAA CTTTTAGCCATGCATCTGCTGATGAGCAATTGTGTCCATTTTTAACACAGCCAGTTAAATCCACCATGGGGCTTA CTGGATTCAAGGGAATACGTTAGTCCACAAAACATGTTTTCTGGTGCTCATCTCACATGCTATACTGTAAAACAG

PCT/US2003/028547

1595/6881 FIGURE 1474B

TTTTATACAAAATTGTATGACAAGTTCATTGCTCAAAAATGTACAGTTTTAAGAATTTTCTATTAACTGCAGGTA ATAATTAGCTGCATGCTGCAGACTCAACAAAGCTAGTTCACTGAAGCCTATGCTATTTTATGGATCATAGGCTCT TCAGAGAACTGAATGGCAGTCTGCCTTTGTGTTGATAATTATGTACATTGTGACGTTGTCATTTCTTAGCTTAAG TGTCCTCTTTAACAAGAGGATTGAGCAGACTGATGCCTGCATAAGATGAATAAACAGGGTTAGTTCCATGTGAAT CTGTCAGTTAAAAAGAAACAAAACAGGCAGCTGGTTTGCTGTGGTGGTTTTAAATCATTAATTTGTATAAAGAA GTGAAAGAGTTGTATAGTAAATTAAATTGTAAACAAAACTTTTTTAATGCAATGCTTTAGTATTTTAGTACTGTA GATGGTGCTACTCAGCCTGCTACAAATATATCATAATGTGAGCTAAGAATTCATTAAATGTTTGAGTGATGTTCC TACTTGTCATATACCTCAACACTAGTTTGGCAATAGGATATTGAACTGAGAGTGAAAGCATTGTGTACCATCATT AACTTGAACTTCAACCTTTTTGTTCTAAAAATTCAGGGATATTTCAGCTCATGCTCTCCCTATGCCAACATGTCA CCTGTGTTTATGTAAAATTGTTGTAGGTTAATAAATATATTCTTTGTCAGGGATTTAACCCTTTTATTTTGAATC CCTTCTATTTTACTTGTACATGTGCTGATGTAACTAAAACTAATTTTGTAAATCTGTTGGCTCTTTTTATTGTAA CTCTCTAAATGAAGTTTTTTTGATCCTGTAATCACTGAAGGTACATACTCCATGTGGACTTCCCTTAAACAGGCA AACACCTACAGGTATGGTGCAACAGATTGTACAATTACATTTTGGCCTAAATACATTTTTGCTTACTAGTATT TAAAATAAATTCTTAATCAGAGGAGGCCTTTGGGTTTTATTGGTCAAATCTTTGTAAGCTGGCTTTTGTCTTTTT AAAAAATTTCTTGAATTTGTGGTTGTGTCCAATTTGCAAACATTTCCAAAAATGTTTGCTTTGCTTACAAACCAC ATGATTTTAATGTTTTTTGTATACCATAATATCTAGCCCCAAACATTTGATTACTACATGTGCATTGGTGATTTT GATCATCCATTCTTAATATTTGATTTCTGTGTCACCTACTGTCATTTGTTAAACTGCTGGCCAACAAGAACAGGA AGTATAGTTTGGGGGGGTTGGGGAGAGTTTACATAAGGAAGAAGAAATTGAGTGGCATATTGTAAATATCAGAT TGATTGACGCACAGTGATGTACAGTTCACTTCTGAAGCTAGTGGTTAACTTGTGTAGGAAACTTTTGCAGTTTGA CACTAAGATAACTTCTGTGTGCATTTTTCTATGCTTTTTTAAAAACTAGTTTCATTTCATTTCATGAGATGTTT GGTTTATAAGATCTGAGGATGGTTATAAATACTGTAAGTATTGTAATGTTATGAATGCAGGTTATTTGAAAGCTG

PCT/US2003/028547

1596/6881 FIGURE 1475

MAPTYKKLAPDAYNNQIEYEHRAPECRLGLKEGRPFSGVTACLDFCAHAHRDLHNMQNGSTLVCTLTREDNREFG
GKPEDEQLHVLPLYKVSDVDEFGSVEAQEEKKRSGAIQVLSSFRRKVRMLAEPVKTCRQRKLEAKKAAAEKLSSL
ENSSNKNEKEKSAPSRTKQTENASQAKQLAELLRLSGPVMQQSQQPQPLQKQPPQPQQQQRPQQQQPHHPQTESV
NSYSASGSTNPYMRRPNPVSPYPNSSHTSDIYGSTSPMNFYSTSSQAAGSYLNSSNPMNPYPGLLNQNTQYPSYQ
CNGNLSVDNCSPYLGSYSPQSQPMDLYRYPSQDPLSKLSLPPIHTLYQPRFGNSQSFTSKYLGYGNQNMQGDGFS
SCTIRPNVHHVGKLPPYPTHEMDGHFMGATSRLPPNLSNPNMDYKNGEHHSPSHIIHNYSAAPGMFNSSLHALHL
QNKENDMLSHTANGLSKMLPALNHDRTACVQGGLHKLSDANGQEKQPLALVQGVASGAEDNDEVWSDSEQSFLDP
DIGGVAVAPTHGSILIECAKRELHATTPLKNPNRNHPTRISLVFYQHKSMNEPKHGLALWEAKMAEKAREKEEEC
EKYGPDYVPQKSHGKKVKREPAEPHETSEPTYLRFIKSLAERTMSVTTDSTVTTSPYAFTRVTGPYNRYI

PCT/US2003/028547

1597/6881 FIGURE 1476

AGGCACAGGCAGCCTGCATACACTCCTTTTCCTGGTGTCAACATTATTTAAAAGCATGGGAAATAGTAATGAGAC AGTGTCTTCTTCATTAGAACCTTAGGAGTCTACTAGATTTCTTCATCTCTATTTGTTGTTATTAGTAGCCAAACT GTGCAAAAAACACGGTCTTGAGAAATGACAGCACAGTATCTTAGAGGGAAAGGAAATGTAGGATGCCAGTGTGGG GACAAATTTCTGATTGCCAGTGATTGTTGTGAGCATAACAATAATTTCATGAACATTAAAGCCTCTATTGAGGGC TAAACAGAAAAAATTTAAACTTTGCTAAAAAAAAAAAAGCAGAAGCACTTGATCTTTAGGAAGGCACGCAGTTGC TTATTATGAATCATTTCTAGAGTCCGATGCATTTTCAAAGCCGGTTACAGTCATTACGAAGCACCCTTGTGAG GTAAGTGTATCATCACCTTTGGTTCATAAATAAAAAAGCTGAGACGCCGAGCGATTAAGTCACTCGCCTAAGGAG AATGAGTCAACGTCAAGAGTCATAGTTGACCCGGCCTAAAGACTCCAGACCATCAGTCCAGGGCTTAGTCAGCGG GGCCCGGAGTGGCTTCCCTGGCTGGCATCTGGACTTAGGCTATTTCCGTGCACGTAAAAGCGGAATATTGGAACG GTTGCACAGAACTTCCAAATAATTTTTACCGCCACGCAAGATTTAGCCCTGAGGTCTTAATCTCAGGATTTGGGA TTCGCAGAAATGGCAACGAATGACCACCAGCATTAGCTGAGCCAGGGGACGTGGGAGGGTTGATTGCCTAAACGA GGGAAGATGGGAGGACAGGGCGACAAAGGGCACAGTAGGCTTGCCTGGCAGTAAGTGTGACCGCAGCTATCCAGG CGGAAGAGCAGAGGACTGAAACCACCCTCCAGCAAGCGAGTGTCCGCCGCGTTGAGAACCGCGCACCCTACCCAT ACTCCACTTCCCAGAAGCCTCTCGTTACTCACGCAGCCGCAGTCTTGCGCAGGTGCCGCCAGGGCCAAACGGACA TATCCGTCACGTGGCCAGAAGCTGGCCAATCCGGTTTGAATCTCATTTTTTCCTCTTACCCCCCCTTCTGGAGC GGTTGTGCGATCAGATCGATCTAAGATGGCGACTGTCGAACCGGAAACCACCCCTACTCCTAATCCCCCGACTAC AGAAGAGGAGAAAACGGAATCTAATCAGGAGGTTGCTAACCCAGAACACTATATTAAACATCCCCTACAGAACAG TACTGTTGAAGACTTTTGGGCTCTGTACAACCATATCCAGTTGTCTAGTAATTTAATGCCTGGCTGTGACTACTC GAACAAACAGCAGAGACGAAGTGACCTCGATCGCTTTTGGCTAGAGACACTTCTGTGCCTTATTGGAGAATCTTT TGATGACTACAGTGATGATGTATGTGGCGCTGTTGTTAATGTTAGAGCTAAAGGTGATAAGATAGCAATATGGAC GATAGTGATTGGTTATCAGTCCCACGCAGACACAGCTACTAAGAGCGGCTCCACCACTAAAAATAGGTTTGTTGT TTAAGAAGACACCTTCTGAGTATTCTCATAGGAGACTGCGTCAAGCAATCGAGATTTGGGAGCTGAACCAAAGCC TCTTCAAAAAGCAGAGTGGACTGCATTTAAATTTGATTTCCATCTTAATGTTACTCAGATATAAGAGAAGTCTCA AATTACAGTACACATCCCCAGAATCCATAAATGTGTTCCTGGCCCACTCTGTAATAGTTCAGTAGAATTACCATT TTCTGTTGTTCCATTTTATGCAGAAGCATATTTTGCTGGTTTGAAAGATTATGATGCATACAGTTTTCTAGCAAT TTGGTGAAGGATCCAGGAATATGACACAAAGGTGGAATAAACATTAATTTTGTGCATTCTTTGGTAATTTTTTT CCTAAACATAATTGTGGATTATAAAAAATGTAACATCATAATTACATTCCTAACTAGAATTAGTATGTCTGTTTT TGTATCTTTATGCTGTATTTTAACACTTTGTATTACTTAGGTTATTTTTGCTTTAGAAAAATGGCTCAAGTAGA ACTAGATTTGTCCTTTTATTCTCCATCTTTATAGAAGGAATTTGTACTTCTTATTGCAAGGCAGTCTCTATATT ATGTCTTCTTTTGTGGTGTCTTCCATGTGAACAGCATAAGTTTGGAGCACTAGTTTGATTATTATTATTATATACA ATTTTTAATAAATTGAATAGGTAGTATCATATATATGGA

WO 2004/030615 PCT/US2003/028547

1598/6881 FIGURE 1477

TCGCTAGGCGCTCGCCACGCCCATGCCTCCGTCGCTGCGCGCCCACCCCGGATGTCAGCCCCCCGCGCCCACCA GAATCCGTGAACATGGCGAACGAGGTTATCAAGTGCAAGGCTGCAGTTGCTTGGGAGGCTGGAAAGCCTCTCTCC ATAGAGGAGATAGAGGTGGCACCCCCAAAGGCTCATGAAGTTCGAATCAAGATCATTGCCACTGCGGTTTGCCAC ACCGATGCCTATACCCTGAGTGGAGCTGATCCTGAGGGTTGTTTTCCAGTGATCTTGGGACATGAAGGTGCTGGA ATTGTGGAAAGTGTTGGTGAGGGAGTTACTAAGCTGAAGGCGGGTGACACTGTCATCCCACTTTACATCCCACAG TGTGGAGAATGCAAATTTTGTCTAAATCCTAAAACTAACCTTTGCCAGAAGATAAGAGTCACTCAAGGGAAAGGA TTAATGCCAGATGGTACCAGCAGATTTACTTGCAAAGGAAAGACAATTTTGCATTACATGGGAACCAGCACATTT TCTGAATACACAGTTGTGGCTGATATCTCTGTTGCTAAAATAGATCCTTTAGCACCTTTGGATAAAGTCTGCCTT CTAGGTTGTGGCATTTCAACCGGTTATGGTGCTGTGAACACTGCCAAGTTGGAGCCTGGCTCTGTTTGTGCC GTCTTTGGTCTGGGAGGAGTCGGATTGGCAGTTATCATGGGCTGTAAAGTGGCTGGTGCTTCCCGGATCATTGGT GTGGACATCAATAAAGATAAATTTGCAAGGGCCAAAGAGTTTGGAGCCACTGAATGTATTAACCCTCAGGATTTT AGTAAACCCATCCAGGAAGTGCTCATTGAGATGACCGATGGAGGAGTGGACTATTCCTTTGAATGTATTGGTAAT GTGAAGGTCATGAGAGCAGCACTTGAGGCATGTCACAAGGGCTGGGGGCGTCAGCGTCGTGGTTGGAGTAGCTGCT TCAGGTGAAGAAATTGCCACTCGTCCATTCCAGCTGGTAACAGGTCGCACATGGAAAGGCACTGCCTTTGGAGGA TGGAAGAGTGTAGAAAGTGTCCCAAAGTTGGTGTCTGAATATATGTCCAAAAAGATAAAAGTTGATGAATTTGTG ACTCACAATCTGTCTTTTGATGAAATCAACAAAGCCTTTGAACTGATGCATTCTGGAAAGAGCATTCGAACTGTT CTAGTTTATTAAGGAATATTTTAACATAATAAAAGTAATTTCTACATTTGTGTGGAAATTGTCTTGTTTTATGCT GTCATCATTGTCACGGTTTGTCTGCCCATTATCTTCATTCTGCAAGGGAAAGGGAAAGGAAGCAGGGCAGTGGTG GGTGTCTGAAACCTCAGAAACATAACGTTGAACTTTTAAGGGTCTCAGTCCCCGTTGATTAAAGAACAGATCCTA GCCATCAGTGACAAAGTTAATCAGGACCCAAGTCTGCTTCTGTGATATTATCTTGAAGGGAGGTACTGTGCCTTG TTCATACCTGTACCCCAAATTCCTAGGATGGCATCTGCCCTTCAGGGGGCACTAAAATGTATTATTGAAACAGCA TTCTGGGCTTAAATAGGTGTATGTATGTGTTGGTTGTGACTGTACTATTTCTAGTATAGTGAACTACATACTGAA TATCCAAGTTCTCAGCACCTACTTTTGTCAAATCTTAACATTTTGCCACTTCGAGATCACATTGCCATTCCTCCC CTCCAGAGGTAACAATTATCCACAATTTGATGTTTATCATTCCTGTGTTGTTGTACTTTCACTGTGTATAACCTA AACCATCTACTCTTTAGTACTGTTTTATATATTTTTTAAGCCTCATACTTGCTCATTCTACAGCTTTTTTCACTCA TTATTGTATAATTATATCTGAAGCTCTCGTTCATTAATTTTAGTCCTGTGTAGCAGAATTCAATTACGGGAACTA CCATAATTTATCTGTTCTCCAGTTGAAGGCATGAAGTTGTTGCCAGTTTCTGTATTATAACACTGTAGTGGAACA TTCTTCTGCATTGGGCTCACTGCGTGTTACCTAAGACGTATCACAGAATAAACACATTTAGCCTTATAGACATTG CCAAATTGCTCTTCAAAGTAAATGTGAGTTTTTGTGAATTACATGAGTATGGAATGGTGTTTTATTATGACTTTA GTTTGCATTTTCCTCAA

PCT/US2003/028547

1599/6881 FIGURE 1478

PCT/US2003/028547

1600/6881 FIGURE 1479

 ${\tt MAGGKAGKDSGKAKTKAVSRSQRAGLQFPVGRIHRHLKSRTTSHGRVGATAAVYSAAILEYLTAEVLELAGNASK}\\ {\tt DLKVKRITPRHLQLAIRGDEELDSLIKATIAGGGVIPHIHKSLIGKKGQQKTV}$

PCT/US2003/028547

FIGURE 1480

PCT/US2003/028547

1602/6881 FIGURE 1481

MLKGKKAKGKKVAPAPAVVKKQEAKKVVNPLFEERPKNFGIGQDIQPKRDLTRFVKWPRYIRLQQQRAILYKRLK VPPAINQFTQALDRQTATQLLKLAHKYRPETKQEKKAVGPGREESCWQRGRPHQETTCPLSSWLSSCLPYVVKWW SLSALSRGRQDWDVSSTGRPAPLSPSHR

PCT/US2003/028547

1603/6881 FIGURE 1482

PCT/US2003/028547

1604/6881 FIGURE 1483

PCT/US2003/028547

1605/6881 FIGURE 1484

PCT/US2003/028547

1606/6881 FIGURE 1485

 ${\tt GGGAAGTGCTGTTGGAGCCGCTGTGGTTGCTGTCCGCGGAGTGGAAGCGCGTGCTTTTGTTTTGTGTCCCTGGCC\underline{\textbf{A}}}$ ${f TG}$ GCGCTGCAGCTCTCCCGGGAGCAGGGAATCACCCTGCGCGGGAGCGCCGAAATCGTGGCCGAGTTCTTCTCAT TCGGCATCAACAGCATTTTATATCAGCGTGGCATATATCCATCTGAAACCTTTACTCGAGTGCAGAAATACGGAC TCACCTTGCTTGTAACTACTGATCTTGAGCTCATAAAATACCTAAATAATGTGGTGGAACAACTGAAAGATTGGT TATACAAGTGTTCAGTTCAGAAACTGGTTGTAGTTATCTCAAATATTGAAAGTGGTGAGGTCCTGGAAAGATGGC AGTTTGATATTGAGTGTGACAAGACTGCAAAAGATGACAGTGCACCCAGAGAAAAGTCTCAGAAAAGCTATCCAGG ATGAAATCCGTTCAGTGATCAGACAGATCACAGCTACGGTGACATTTCTGCCACTGTTGGAAGTTTCTTGTTCAT TTGATCTGCTGATTTATACAGACAAAGATTTGGTTGTACCTGAAAAATGGGAAGAGTCGGGACCACAGTTTATTA CCAATTCTGAGGAAGTCCGCCTTCGTTCATTTACTACTACAATCCACAAAGTAAATAGCATGGTGGCCTACAAAA $\tt TTCCTGTCAATGAC\underline{\textbf{TGA}} \texttt{GGATGACATGAGGAAAATAATGTAATTGTAATTTTGAAATGTGGTTTTCCTGAAATCA$ CTGTGTGTAATTGTTCCTTTATTTTTTGGTACCTATTTGACTTACCATGGAGTTAACATCATGAATTTATTGCA CATTGTTCAAAAGGAACCAGGAGGTTTTTTTGTCAACATTGTGATGTATATTCCTTTGAAGATAGTAACTGTAGA TGGAAAAACTTGTGCTATAAAGCTAGATGCTTTCCTAAATCAGATGTTTTGGTCAAGTAGTTTGACTCAGTATAG GTAGGGAGATATTTAAGTATAAAATACAACAAAGGAAGTCTAAATATTCAGAATCTTTGTTAAGGTCCTGAAAGT AACTCATAATCTATAAACAATGAAATATTGCTGTATAGCTCCTTTTGACCTTCATTTCATGTATAGTTTTCCCTA TTGAATCAGTTTCCAATTATTTGACTTTAATTTATGTAACTTGAACCTATGAAGCAATGGATATTTGTACTGTTT AATGTTCTGTGATACAGAACTCTTAAAAATGTTTTTTCATGTGTTTTATAAAATCAAGTTTTAAGTGAAAGTGAG

PCT/US2003/028547

1607/6881 FIGURE 1486

MALQLSREQGITLRGSAEIVAEFFSFGINSILYQRGIYPSETFTRVQKYGLTLLVTTDLELIKYLNNVVEQLKDW LYKCSVQKLVVVISNIESGEVLERWQFDIECDKTAKDDSAPREKSQKAIQDEIRSVIRQITATVTFLPLLEVSCS FDLLIYTDKDLVVPEKWEESGPQFITNSEEVRLRSFTTTIHKVNSMVAYKIPVND

PCT/US2003/028547

1608/6881 FIGURE 1487

CTGGGATTACAGGTGTGAGCCATCTTGCTCATTTTAGTTTAAACTTTTGAGTGGTTTGTGTCTCCTGATTGGACT GGTTATCCAAGGAGCAGTGCTGAGCTCCTTGCTAATGGGATATGGGATGCTGGTGATTTCCAGGAAGTGACCTCA CAATGACTCAAGCTACCACATACTGTTGATTGTGAAATGCCAGTTGAAGCATATGTCCTGCGAGCTTAGGGGTGC CAGCGGTCTCCAACCACAGGGCCACAGAGCTGGAGCTGGATCTACCATGAAAGACTTCTGAATCCAGGAAGAGAG ACTGACTGGGCAACATGTTATTCAGGTGGGACCATCCAGTTGCAGGAAAACAAGCTTAACATGCCCACTGATTCT ACATTATGCTCCTACCTCCCGGCAGCCTCTCCAGGCCCAGAACTTTCTCCAGTCAGCCTCTACAGACCAAGCTCA TGACTCACAATGGCCTATTTAGGCCCATACCCTACCTCACGGCAGTCTCCGCAGATGAGCCTACTGCCTCACAAC AGCCTCCACAGGCACAGCTCCATCGTTACAATGGCCTCTTTAGACCCAGCTCCTGCCTCCCAGCCTTCTCTCTAG GCCCTGAACTTTCTGAAGTCGACCTCACCAGGCCCAGCTCATGCTTCTTTGCAGCCTCTCCAGGCCCAGCTCCTG CATCTTGGTGGCCCCTCCAGGCCCAGCCTCTGCCTCCGTCGGCCTCTACAGTCCCAACATCTGCCTCATAGCAG ATTCTTGAGGCCCAGCATCTGCCTCACTGTGGACCCCCAGACCCAGATGGTGTCTCACTGTGGCATCCTCAGGC AAAGCTCCTGCCTTTCGGCAGCCTCTCCAGGCCCAGCTCCTCCTGCCTCCCAGTGGCCTCTTTCGGCCCAGCCCA GCTCATGCCTCCCAGCGCCCTCCCAGGCCCCGCTTTTGACTTTCGGTGGCCTCTGCAGGCCTCGACAAGGCCTG GCCTCCTGCCTCCCGAA

PCT/US2003/028547

1609/6881 FIGURE 1488

 ${\tt MLLPPGSLSRPRTFSSQPLQTKLMTHNGLFRPIPYLTAVSADEPTASQQPPQAQLHRYNGLFRPSSCLPAFSLGPELSEVDLTRPSSCFFAASPGPPLPPVGLYSPNICLIADS}$

PCT/US2003/028547

FIGURE 1489

AGGGCCGGGGTGGGGCGTTTCCGTTGCTTGGATCAGTCTAGGTGCAGCTGCGGATCCTTCAGCGTCTGC ATCTCGGCGTCGCCCGCGTACCGTCGCCCGGCTCTCCGCCGGGGGTTCGGGGCACTTGGGTCCCAC TTCCCTGGATTTGATGAGCGGGCTGATGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAG AGCATCCTGACTCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTGTTT CCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTGAAGGGAGCTGGAACAAATGAAAAAGTACTGACA GAAATTATTGCTTCAAGGACACCTGAAGAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGC CTGGAAGATGACGTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAACAGA GACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTTCAGGCTGGAGAACTTAAA TGGGGGACAGATGAAGAAAGTTTATCACCATCTTTGGAACACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGAC AAGTACATGACTATATCAGGATTTCAAATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTA CTCCTTGCTGTTGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAGGGA GCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGATCTGTTTAACATCAGGAAG GAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGATTAAGGGAGATACATCTGGGGACTATAAGAAAGCT $\tt CTTCTGCTGCTGTGGAGAAGATGAC\underline{TAA} \tt CGTGTCACGGGGAAGAGCTCCCTGCTGTGTGCCTGCACCACCCCA$ CTGCCTTCCTTCAGCACCTTTAGCTGCATTTGTATGCCAGTGCTTAACACATTGCCTTATTCATACTAGCATGCT AGGCTAGAGTGCTTTTTAGCCTTTTTTAAAAACTCCATTTATATTACATTTGTAACCATGATACTTTAATTAGAAG CTTAGCCTTGAAATTGTGAACTCTTGGAAATGTTATTAGTGAAGTTCGCAACTAAACTAAACCTGTAAAATTATG ATGATTGTATTCAAAAGATTAATGAAAAATAAACATTTCTGTCCCCCTGAATTAT

PCT/US2003/028547

1611/6881 FIGURE 1490

MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDLLDDLKSELTG KFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAIKQVYEEEYGSSLEDDVVGDTSGYYQ RMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETI DRETSGNLEQLLLAVVKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMI KGDTSGDYKKALLLLCGEDD

PCT/US2003/028547

FIGURE 1491

CATAACAAGCCAAACGCCAGACCGAGAGTGCCTCCGTGCGCGAGTGCCCGGTGTGTGCGCGCGGCGAGAGCAGG $\tt CCTCGGCCGAACCCCTCCGCAGCAGGCTGCCTGTTTCCCGGGGAGATC\underline{ATG}AAACGAGGTCGCCTTCCCAGC$ AGCAGTGAGGATTCTGACGACAATGGCAGCCTGTCAACTACTTGGTCCCAGAATTCCCGATCCCAGCATAGGAGA AGCTCCTGCTCCAGACATGAAGATCGAAAGCCTTCAGAGGTGTTTAGGACAGACCTGATCACTGCCATGAAGTTG CATGACTCCTACCAGCTGAATCCGGATGAGTACTATGTGTTGGCAGATCCCTGGAGACAGGAATGGGAGAAAGGG GTCCAGGTGCCTGTGAGCCCGGGGACCATCCCTCAGCCTGTGGCCAGGGTTGTGTCTGAAGAGAAATCCCTCATG TTCATCAGGCCCAAGAAGTACATCGTGTCATCAGGCTCTGAGCCTCCCGAGTTGGGCTATGTGGACATCCGGACG CTGGCTGACAGCGTGTGTCGCTATGACCTCAATGACATGGATGCTGCATGGCTGGAACTGACCAATGAAGAATTT AAGGAGATGGGAATGCCTGAACTAGATGAATACACCATGGAGGGGTCCTAGAGGAATTTGAGCAGCGATGCTAC GACAATATGAATCATGCCATAGAGACTGAGGAAGGCCTGGGGATCGAATATGATGAAGATGTTGTCTGTGATGTC TGCCAGTCTCCTGATGGTGAGGACGGCAATGAGATGGTGTTCTGTGACAAATGCAACATCTGTGTGCACCAGGCC TGTTATGGAATCCTCAAGGTACCAGAGGGCAGCTGGCTGTGCCGGACATGTGCCCTGGGGGTTCAGCCAAAATGT CTGCTGTGTCCGAAGAAGGGTGGAGCTATGAAGCCCACCCGTAGCGGAACCAAGTGGGTCCACGTTAGCTGTGCT CTGTGGATCCCTGAGGTGAGCATTGGCAGCCCAGAGAAGATGGAGCCCATCACCAAGGTGTCACACATTCCCAGC AGCCGGTGGGCGCTAGTGTGCAGCCTCTGCAATGAGAAGTTTGGGGCCTCTATACAGTGCTCTGTGAAGAACTGC CGCACAGCCTTCCATGTGACCTGTGCTTTTGACCGGGGCCTGGAGATGAAGACCATCTTAGCAGAGAATGATGAA GTCAAGTTCAAGTCCTATTGCCCAAAGCACAGCTCACATAGGAAACCCGAGGAGAGTCTTGGCAAGGGGGCTGCA CAGGAGAATGGGGCCCCTGAGTGTTCCCCCCGGAATCCGCTGGAGCCCTTTGCCAGCCTTGAGCAGAACCGGGAG GAGGCCCACCGGGTGAGTGTCCGTAAGCAGAAGCTGCAGCAGTTGGAGGATGAGTTCTACACCTTCGTCAACCTG CTGGATGTTGCCAGGGCTCTGCGGCTGCCTGAGGAAGTAGTGGATTTCCTGTACCAGTACTGGAAGTTGAAGAGG AAGGTCAACTTCAACAAGCCCCTGATCACCCCAAAGAAGATGAAGAGGACAATCTAGCCAAGCGGGAGCAGGAT GTCTTATTTAGGAGGCTGCAGCTGTTCACGCACCTGCGGCAGGACCTGGAGAGGGTAATGATTGACACTGACACC TTA<u>TAG</u>TGACTTAGAGAAGAAGATGCAAAGAGGCGAACGCTCGCCCAGAGCAAGAAATGATAGCCAGTCATATAC TCTCAGACCCTTGTACACACCACAGCATGAGGTTGTGTTGGTTAAAAATATTTATGGGCTGGTAAACTCATTGTA TTTACTGTTTTGTAAGATCAAATGGGGTGTGTCTTCCCCACCCCCATTCCTTCATTCTAGAGCTAGAGTGAATGA GCCCCAAGAAAATGACCCAAGGAGTTGACTCAGGATGGTTTACAGACTGATTTAGAAAACCAGAACGGATTTCAT TTCTAATGGAGGGGCCAGAGATGGGAAAATTTCTTGTTCAGTCCGGGGAAACACACCTAGGTGCTGGTGATGGG CTTATGAAGGAAGCTAAGCACGGCTGCTCACTGGCCCCCACTTTGTTTCTTGGGTAATTCACAGGGGAATTCCCA GGCTGTTGGCTGCCGAGCCTCAGCTGCTGCATTTCCTTCTGCTGTTTGCTGCTTTTGTGCCTCCCCCACTTTCC ATCACCTCTGGAGTCCCGTCTGGACGTCCCTTCCTGCTACAGGAATAATGAGGCGTGGGCTGCCTCCCGCTAGGG ${\tt CCTCCTGCTCCCTGTAGGTAGTTTCTGGCTGAGGCTTGCTAATTGGGGATGCTTCTTAGAGCATCTTCCACATCA}$ ACTCCCCTGGCTGCTGCCTACCGATTAAATTCATTAGTGTGAAAGAGGTGGGAGTGAGGTTTTCTGGCCTGAAGC AGTCTGCACTGAAAGGTACCCAAGTGGCCTGAAACAGTGTAGGGAAAGACCTGGGAAACACTGGACCAAAAAAAGC CTGATCTCATGGAGACCTGCATGGCCCTGTTAGAGATGGCGTAGAAGTGAAAGTCTTAAAGGGAGCATTAGAGAT CCTTTTAATACACGACTGAGTGCCAGCTTATTTGTGATGCCCCTTCCCAGACCAGGTTAGGATTCCTGGGAAGGC CGCGGATTCCGGCCCTGGAAGAGGCAGGATCCTGGAGCAGTTTTGTGAGGCTTTTGTGCTCCCATACGCCCCTG ATTGAGAAGGATAAACTGGAATCCTGGTAAGAAGCCTTTATGCCAGCCCGACACCTGCTGAATTGGGGTGCATG ${\tt AGCTATGGAGTCAGATAGTTGTTGGGAGGGGGGGGAGACAAGAAGTCTATTGTTTGGACTGTTTTGTCTCACAATC}$ ACCACAAAATAAAAGTGTAGAAAATGCTTGTGGTGTACTAACTCTTTTCTGTACTTAAGTTACTCAGATTAACAT GCACTTCTAATTCTAAACATTTTTTTTGGAGTCATCACTGTCGCTGTTTAAGTAGAACAATGCCAACGATGTATG AGAAACAGGGAATAAATCAGGATTTGTGTGTGT

PCT/US2003/028547

FIGURE 1492

MKRGRLPSSSEDSDDNGSLSTTWSQNSRSQHRRSSCSRHEDRKPSEVFRTDLITAMKLHDSYQLNPDEYYVLADP WRQEWEKGVQVPVSPGTIPQPVARVVSEEKSLMFIRPKKYIVSSGSEPPELGYVDIRTLADSVCRYDLNDMDAAW LELTNEEFKEMGMPELDEYTMERVLEEFEQRCYDNMNHAIETEEGLGIEYDEDVVCDVCQSPDGEDGNEMVFCDK CNICVHQACYGILKVPEGSWLCRTCALGVQPKCLLCPKKGGAMKPTRSGTKWVHVSCALWIPEVSIGSPEKMEPITKVSHIPSSRWALVCSLCNEKFGASIQCSVKNCRTAFHVTCAFDRGLEMKTILAENDEVKFKSYCPKHSSHRKPEESLGKGAAQENGAPECSPRNPLEPFASLEQNREEAHRVSVRKQKLQQLEDEFYTFVNLLDVARALRLPEEVVDFLYQYWKLKRKVNFNKPLITPKKDEEDNLAKREQDVLFRRLQLFTHLRQDLERVMIDTDTL

PCT/US2003/028547

FIGURE 1493

GTGTAAGTCAATGTGAAGCAGCAGCTCCAGCCCCGGGATAAACATGGCGACGTCTCTGCATGAGGGACCCACGAA CCAGCTGGATCTGCTCATTCGGGCCGTGGAAGCATCAGTTCACAGCAGTAATGCACACTGTACAGATAAGACAAT TGAAGCTGCTGAAGCCCTGCTTCATATGGAATCTCCTACCTGCTTGAGGGATTCAAGAAGTCCTGTGGAAGTGTT TGTTCCTCCTTGTGTATCAACTCCAGAATTCATCCATGCTGCTATGAGGCCAGATGTCATTACAGAAACTGTAGT GGAGGTGTCAACTGAAGAGTCTGAACCCATGGATACCTCTCCTATTCCAACATCACCAGATAGCCATGAACCAAT GAAAAAGAAAAAGTTGGCCGTAAACCAAAGACCCAGCAATCACCAATTTCCAATGGGTCTCCTGAGTTAGGTAT AAAGAAGAAACCAAGAGAAAGGAAAAGGAAACCCAACCTATTTGTGGGAGTTTCTTTTAGATCTACTTCAAGATAA AAATACTTGTCCCAGGTATATTAAATGGACTCAGAGAGAAAAAGGCATATTCAAGCTGGTGGATTCAAAGGCTGT CTCTAAGCTTTGGGGAAAGCATAAGAACCAGACATGAACTATGAAACCATGGGACGAGCTTTGAGATACTA CTACCAAAGGGGAATTCTTGCAAAGGTTGAAGGACAGAGGCTTGTATATCAGTTCAAGGATATGCCGAAAAACAT AGTGGTCATAGATGACAAAAGTGAAACCTGTAATGAAGATTTAGCAGGAACTACTGATGAAAAATCATTAGA ACGAGTGTCACTGTCTGCAGAAAGTCTCCTGAAAGCAGCATCCTCTGTTCGCAGTGGAAAAAATTCATCCCCTAT AAACTGCTCCAGAGCAGAAGGGTGTAGCTAGAGTTGTGAATATCACTTCCCCTGGGCACGATGCTTCATCCAG GTCTCCTACTACCACTGCATCTGTGTCAGCAACAGCAGCTCCAAGGACAGTTCGTGTGGCAATGCAGGTACCTGT CAGCACTAGTCCAACAACAGCGACĆTCTCCAAAGGTAGTCATTCAGACAATCCCTACTGTGATGCCAGCTTCTAC TGAAAATGGAGACAAAATCACCATGCAGCCTGCCAAAATTATTACCATCCCAGCTACACAGCTTGCACAGTGTCA ACTGCAGACAAAGTCAAATCTGACTGGATCAGGAAGCATTAACATTGTTGGAACCCCATTGGCTGTGAGAGCACT TACCCCTGTTTCAATAGCCCATGGTACACCTGTAATGAGACTATCAATGCCTACTCAGCAGGCATCTGGCCAGAC TCCTCCTCGAGTTATCAGTGCAGTCATAAAGGGGCCAGAGGTTAAATCGGAAGCAGTGGCAAAAAAGCAAGAACA TGATGTGAAAACTTTGCAGCTAGTAGAAGAAAACCAGCAGATGGAAATAAGACAGTGACCCACGTAGTGGTTGT CAGTGCGCCTTCAGCTATTGCCCTTCCTGTAACTATGAAAACAGAAGGACTAGTGACATGTGAGAAATAAAATAG CAGCTCCACCATGGACTTCAGGCTGTTAGTGGCAGTACTGACATAAACATTTGCAAGGGAAGTCATCAAGAAAAG ATGTTTCAGTGGGAAATGAACTACATATTGAGATGCTGACAGAAAACTGCCTCTTACAGTAGGAAACAACTGAAC CCATCAATAAGAAAAAGGATCGAAAGGGACCAAGCAGCTCACTACGATATCAAGTTACACTAAGACTTGGAACAC TAACATTCTGTAAGAGGTTATATAGTTTTCAGTGGGAGGGGTTGGGATGGGTAATCTCATTGTTACATATAGCAA TTTTTGATGCATTTTATATGCATACCAGCAATTATTACTGTGTTCGCACAGTTCTCACTTAACTGGTGCTATGTG AAGACTCTGCTAATATAGGTATTTTAGAATGTGAATTGAAGAATGGATCCCAAAAACTTCAGAAAAGAGGATAGCA GCTTTTTTATTAAAAGAAAATTTTAAAAATCTTGTACCTAGCACAGTATTGTTATAGAATATACATGTAACATT TTATATGGTAGTTTAAGTCTGTCAGTTTCTTAATTGTGGACAAATTAACAGTTGGCTCTGGCCTTTTGCTGTAAC ATGCCTGTGTCACTCACTTAGCCTTGGCATTTGTGCAGACATACCATTTTCAGTTCTGCTGTCACTTGGAAGTTC AAGTTTATGAGGGAAATACCAGTGTTCAGTTTTGAACTATAATAGTTTGTATATTCAACATTTGAAGTATATTCT ATTTTGTTGTACTCTTGTTTCAAAGTGTATTCAAGTAGGTTTTCTGAAATATAGAAATGAAATTTATCTTCTGTT CTCTCTTCTCCTTCCCAACTACTGCATGAAGAAATTCTACTTCCATTATATTAATATTTGG

PCT/US2003/028547

FIGURE 1494

PCT/US2003/028547

1616/6881 FIGURE 1495

MAGNSILLAAVSILSACQQSYFALQVGKARLKYKVTPPAVTGSPEFERVFRAQQNCVEFYPIFIITLWMAGWYFN QVFATCLGLVYIYGRHLYFWGYSEAAKKRITGFRLSLGILALLTLLGALGIANSFLDEYLDLNIAKKLRRQF

PCT/US2003/028547

FIGURE 1496

PCT/US2003/028547

FIGURE 1497

ATGAAGAAAGGAAAGCTCATCTCTGCCACATTTCTGGAAAGCGCTGTTCCCGGTGCTCACCTATTGTCTCGCAGG
CAGGTTTCTGAAAGGATGGAGGAAATCTGCAGGAAGCACATGTTTCTGCTTAATTCCTGCCAGCTTTTGGCTGTC
AGACCCCAAATCCTTCAGCCACTAGCCTGTTCAGGGCCCTGGTTGATAACCCTGCAATTGCAGAGTGGAGTGGG
AGGAGAAGCCTCATACCTTTGTTTTTCTGGTTCTTCCCAACACCCTGGTGGCCTACTTGGGTGTCCCACAAGCTC
TCTGTGGAAAATAGTGCATCTCATTTAGCAACAACTCCACCTAGCACAAGTTCTGAGCTATACTTAAACCAGTGG
GGAGAGAGTGTTGGAATGATTAAGGCTTGCATTCGACTGTGCAAGAAGAACCACTTTTCTCTTCATGGTGCTGGAG
GCCAGAGATTGAGGCTCTCAAGGAGGAGCTGCTCTTCATGAAGAAGAACCACGAAGAGAAGTAAAAAGGCCTACAA
GCCCAGAGTGCCAGCTCTGGTTTGACCCTGGAGGAGCTGGACAAGTATTGGTCTCAGCAGATTGAGGAAGAGCCC
ACAGTGGTCACCACGCAGCCTGCCAAGGTTGGAGCTGCTGAAGATTGATGCTCACAGAGCTGAACATACAGTCCAG
TCTTTGGAGATCGACCTGGACTCCTTGAGAAATCTGAAGGCCAGCTTGGAGAACAGCCTGAATGAGCAGCTCAA
CGGCATCCTGCTGCACCCGGAGTCAGAGCTGGCACAGACCCAGAGGGACAGTGCCAGGCCCAGGAGTACGAGGCC
CTGCTGAACATCAAGGTCAAGCTGGAGCCTGAGATCACCACCTACTGCCGCCTGCTGGAAGATGACGAGGACTTC
AATCTTGTGGATGGCAAAGTGGTGTCTGAGACCCAATGATACCAAAGTTCTGAGACATTAA

PCT/US2003/028547

1619/6881 FIGURE 1498

MKKGKLISATFLESAVPGAHLLSRRQVSERMEEICRKHMFLLNSCQLLAVRPQILQPLACSGPWFDNPAIAEWSG RRSLIPLFFWFFPTPWWPTWVSHKLSVENSASHLATTPPSTSSELYLNQWGESVGMIKACIRLCKKNHFLFMVLE AEIEALKEELLFMKKNHEEEVKGLQAQSASSGLTLEELDKYWSQQIEESATVVTTQPAKVGAAEMMLTELRHTVQ SLEIDLDSLRNLKASLENSLNGAAQRHPAAPGVRAGTDPEGQCQAQEYEALLNIKVKLEAEITTYCRLLEDDEDF NLVDGKVVSETNDTKVLRH

PCT/US2003/028547

1620/6881 FIGURE 1499

PCT/US2003/028547

FIGURE 1500

TGAGAACACGCTGTGTGGCTGAAAAGTGAAGGCAAGAGCTGATTTGGCCTCTGTGCTCCCCTCCGCAAGGGGATC GTTTTCTCCAGAAGAGCTGGATATTCTTTCGCCCAGTT<u>ATC</u>GCAGACAAGTTAACGAGAATTGCTATTGTCAACC ATGACAAATGTAAACCTAAGAAATGTCGACAGGAATGCAAAAAGAGTTGTCCTGTAGTTCGAATGGGAAAATTAT GCATAGAGGTTACACCCCAGAGCAAAATAGCATGGATTTCCGAAACTCTTTGTATTGGTTGTGTATCTGTATTA AGAAATGCCCCTTTGGCGCCTTATCAATTGTCAATCTACCAAGCAACTTGGAAAAAGAAACCACACATCGATATT GTGCCAATGCCTTCAAACTTCACAGGTTGCCTATCCCTCGTCCAGGTGAAGTTTTGGGATTAGTTGGAACTAATG GTATTGGAAAGTCAACTGCTTTAAAAATTTTAGCAGGAAAACAAAAGCCAAACCTTGGAAAGTACGATGATCCTC CTGACTGGCAGGAGATTTTGACTTATTTCCGTGGATCTGAATTACAAAATTACTTTACAAAGATTCTAGAAGATG ACCTAAAAGCCATCATCAAACCTCAATATGTAGACCAGATTCCTAAGGCTGCAAAGGGGACAGTGGGATCTATTT TGGACCGAAAAGATGAAACAAAGACACAGGCAATTGTATGTCAGCAGCTTGATTTAACCCACCTAAAAGAACGAA ATGTTGAAGATCTTTCAGGAGGAGAGTTGCAGAGATTTGCTTGTGCTGTCGTTTGCATACAGAAAGCTGATATTT TCATGTTTGATGAGCCTTCTAGTTACCTAGATGTCAAGCAGCGTTTAAAGGCTGCTATTACTATACGATCTCTAA TAAATCCAGATAGATATATCATTGTGGTGGAACATGATCTAAGTGTATTAGACTATCTCTCCGACTTCATCTGCT GTTTATATGGTGTACCAAGCGCCTATGGAGTTGTCACTATGCCTTTTAGTGTAAGAGAAGGCATAAACATTTTTT TGGATGGCTATGTTCCAACAGAAAACTTGAGATTCAGAGATGCATCACTTGTTTTTAAAGTGGCTGAGACAGCAA ATGAAGAAGAAGTTAAAAAGATGTGTATGTATAAATATCCAGGAATGAAGAAAAAAATGGGAAATTTGAGCTAG CAATTGTAGCTGGAGAGTTTACAGATTCTGAAATTATGGTGATGCTGGGGGAAAATGGAACGGGTAAAACGACAT TTATCAGAATGCTTGCTGGAAGACTTAAACCTGATGAAGGAGGAGAAGTACCAGTTCTAAATGTCAGTTATAAGC CACAGAAAATTAGTCCCAAATCAACTGGAAGTGTTCGCCAGTTACTACATGAAAAGATAAGAGATGCTTATACTC ACCCACAATTTGTGACCGATGTAATGAAGCCTCTGCAAATTGAAAACATCATTGATCAAGAGGTGCAGACATTAT CTGGTGGTGAACTACAGCGAGTAGCTTTAGCCCTTTGCTTGGGCAAACCTGCTGATGTCTATTTAATTGATGAAC CATCTGCATATTTGGATTCTGAGCAAAGACTGATGGCAGCTCGAGTTGTCAAACGTTTCATACTCCATGCAAAAA AGACAGCCTTTGTTGTGGAACATGACTTCATCATGGCCACCTATCTAGCGGATCGCGTCATCGTTTTTGATGGTG $\mathtt{AAAAGAAGAGTGGAAACTACTTTTCTTGGATGAT}$ $\mathtt{ACTGACTCTGAGAATATTGATAAGCCATTTATTAAAA}$ GGAGTATTTACTAGAATTTTTTGTCATATAAAACTTGAATCAGGATTTTATGCCCCACATACTCTGGAACTTGAA GTATAATATACTTAATATAACATAAAAAGCCAGTTGGGTTCTAAATTGTAGTTGAAACACAGAAAATGCCACTTT TCTGTTCCTGAAGAGGCTCTTTTGTGCATAATATTCTAAAATGAAGACATTTCAAGCTATACAAATTACTTCCAA GTTTTCATGATGTATGGGAAGATTTTCAGTAGGTGTATTATATTCACGGTACCAAATGCTGACCAGTGTTGCTCC ATTTTTTAAATCTTGAAAAGGGTTTCTGTACTTACCTGGTTTGCCAAGTATGCCAGTGTAATGAAACTGCCCTTA TCAGTCTTTGCACTATATTACCAGTATATGGTTTCCGAGGAAGATTATCTACTGCAAAACACCACTGTTGGAAAA ATAGGTATTTTAAATTGTTTTTAATCTTTTTTGGTGCTTTTAAACATGTTTAGCAAAAACCAATTCAGTTCCAT TCTCTAGGTAATGTCATTTTTGTACACATATATTTATATAATCACTGATTGAGATTTAGGAAAAAGCATTTCTAA AAGTTCCACAGATTTTTCTGTTGGGCAGCCAAGGATTATAAACCACTTCCCTAAAGGCAACATTAATGCAAAAGT CCCCAGATGGCAATACAAAGTATCCCCTGGTACCACATATATTCATTTGTGAGTTTGGATATAGAGCACATTATC TAAACCATTTTGTAGTTCCAAAAACCCATCTAAATTTCTTGAGTTCCTGAATTTTGAACAGGATTACCTGGAGCC GGGGCAAGCAAAATTGAGGAGGAAATTAGAAACTGTTTGACAAACTTTAAGAGCTACTTGAAATAACAGAAGTCT TGATTAATATGCAAATAATGGCTAGAAAGTATGGTTTAACTGGACCCTATTATGCCTTTTAAAAAATAATTTCAGT AACCCATAAATACATGTTGTAAAAAATTCAAATATACAGAATGGAATAAAAAAATGATCTCCCTTTATTACCCTC CCAAAGGTTACCAGCGTTTGAATTTAATAATGTATATTCTTTCATGCTTTTTTCTGTGCACTTACCTAAGTGTGA ATATGTAAAGGGTTTGTTTTGTATACAAATGGGATTATACTAAAATAAGTAATGCCTATTTTTAAGGATAGGTTA AATTTGTGAATGATCATTTCAAATATATTGAATAAAATAAGCAAAAGCTATTGTTATTTACTGATCCTG

PCT/US2003/028547

FIGURE 1501

MADKLTRIAIVNHDKCKPKKCRQECKKSCPVVRMGKLCIEVTPQSKIAWISETLCIGCGICIKKCPFGALSIVNL PSNLEKETTHRYCANAFKLHRLPIPRPGEVLGLVGTNGIGKSTALKILAGKQKPNLGKYDDPPDWQEILTYFRGS ELQNYFTKILEDDLKAIIKPQYVDQIPKAAKGTVGSILDRKDETKTQAIVCQQLDLTHLKERNVEDLSGGELQRF ACAVVCIQKADIFMFDEPSSYLDVKQRLKAAITIRSLINPDRYIIVVEHDLSVLDYLSDFICCLYGVPSAYGVVT MPFSVREGINIFLDGYVPTENLRFRDASLVFKVAETANEEEVKKMCMYKYPGMKKKMGEFELAIVAGEFTDSEIM VMLGENGTGKTTFIRMLAGRLKPDEGGEVPVLNVSYKPQKISPKSTGSVRQLLHEKIRDAYTHPQFVTDVMKPLQ IENIIDQEVQTLSGGELQRVALALCLGKPADVYLIDEPSAYLDSEQRLMAARVVKRFILHAKKTAFVVEHDFIMA TYLADRVIVFDGVPSKNTVANSPQTLLAGMNKFLSQLEITFRRDPNNYRPRINKLNSIKDVEQKKSGNYFFLDD

PCT/US2003/028547

FIGURE 1502

AGGAAATGAGGCTGAACTTTGTAGTGCCCTCGCTAACCTTCAGACCAGTAAACCAGATGCTGTAGAGCAGACATG TATATTGGAATCTACAGAAATTGCTTTGCTTAACAACATCCCATATCATGAAGGCTTTAAAAATGGCAATGAGCAA AGTTTTGTCTTCACTGACTCCAGAGAAACTGTATCAGACCATGGATACTCACTGTCAGAATGAGATGAGCTCTGG AACTGGACAGAGTAATACTGTACAGAACATCCTTGAACCTTTCTACGTGTTAGATGTGTCCGAAGGCTTCTCTGT TCTGCCTGTTATTGCTGGCACACTTGGGCAGGTTAAACCATACAGTTCTGTGGAGAAAGACCAGCATCGTATTGC TCTGGACCTCATATCTGAAGCCAATCACTTTCCTAAAGAAACACTTGAGTTTTGGCTGAGACATGTGGAGGATGA ATCTGCTATGTTACAAAGGCCAAAATCAGACAAGTTATGGAGCATAATTATATTGGATGTCATTGAGCCATCTGG GCTCATTCAGCAGGAAATAATGGAAAAAGCTGCAATATCCAGGTGTTTACTACAATCTGGAGGCAAGATCTTTCC TCAGTATGTGCTGATGTTTGGGTTGCTTGTGGAATCACAGACACTCCTAGAGGAGAATGCTGTTCAAGGAACAGA ACGTACTCTTGGATTAAATATAGCACCTTTTATTAACCAGTTTCAGGTACCTATACGTGTATTTTTGGACCTATC CTCATTGCCCTGTATACCTTTAAGCAAGCCAGTGGAACTCTTAAGACTAGATTTAATGACTCCGTATTTGAACAC CCTTGATGAAGAGATTAGGTTGGATACTTCAAGTGAAGCCTCCCACTGGAAACAAGCTGCAGTTGTTTTAGATAA TCCCATCCAGGTTGAAATGGGAGAGGAACTTGTACTCAGCATTCAGCATCACAAAAGCAATGTCAGCATCACAGT AAAGCAATGAAGAGCAGTTTTCCAATGAAAACTGTGTAAATAGAGCATCAACAAGTACAAAATTCTTGTCTTAAT TAGTGGGGGTATATAAAAATTCCTTGTAATGGTCAAATATTTTTTAAAATTGACATTAATAAAGCATATTTTAAA AGATTCTAAATAAAAGGGTAGCATTATTATAGAAATACTGCTGCAGATTTGCTTTCTGGAAAAGGATACATCACT AGTTTTTTAAATTAGGAAACTTCTTTTGCTCGATTTTACAGAATAGGGATTTTAAAAGTCTTATCGTTATTGACA TGTGTAAGTAAAGCAAAACTTTACTTTTGTAGGCATCTTGGCCTTTTTTCTTAAATCCAAACTTGTAATTGGGAA ACACTGAAAGGCTTCCACTGAAGACTGAGGGTTATGGTTACCTGTAAATTCCAATCTTGCTTCCTTTAAATACTC AGTGTACATCTGAAACATCTCAGGTTTTGTTTTGAGAATGCAAGCTTGAAAAAGAATTTAAGCTATAAGCTAAAT GTAATTAAAACAGTAAAGGAGTTAGGGAATACATCTTCAGGAGGCAGCATTTTTCTTGGTCTACTTTGGCAAAAG ATTTGGATGTACAATAAGTACATTAATTGATCCAATTTTTACAAACTTTTGAAATAAAGGAAGATCATTATTATG CCTCCT

PCT/US2003/028547

1624/6881 FIGURE 1503

MAMSKVLSSLTPEKLYQTMDTHCQNEMSSGTGQSNTVQNILEPFYVLDVSEGFSVLPVIAGTLGQVKPYSSVEKD QHRIALDLISEANHFPKETLEFWLRHVEDESAMLQRPKSDKLWSIIILDVIEPSGLIQQEIMEKAAISRCLLQSG GKIFPQYVLMFGLLVESQTLLEENAVQGTERTLGLNIAPFINQFQVPIRVFLDLSSLPCIPLSKPVELLRLDLMT . PYLNTSNREVKVYVCKSGRLTAIPFWYHMYLDEEIRLDTSSEASHWKQAAVVLDNPIQVEMGEELVLSIQHHKSN VSITVKQ

PCT/US2003/028547

FIGURE 1504

AGATGCAACGCAAGCAACGACTTCGTCACACTAAAACGGATTTTGTGAGGGCCCAAAAGTATAAATTACGAAGCAG CAGTCCAAACAACGCCTCCAGTAGGAAAAGAGGAAAACTGCGATAACACGACCCCCGAGAAGAGACGAGACCAA CACGCTGAGACTGTGGGGCGTCAGCAAACCTCCAAGTGCACGGCGGACTGAGTTGTACTTCGCAGCTCTCTGGAC ATTAATTACCTCCTGCACCTTCCATTTGGGGGAGGGTGAGGAAGAAGGCACTCACCTACACTGAGCGAAGAAGTC CTATCAGCGTGGAAGAGTTTAAGAATGAACCACTGAATGTTTCGCTTTTATTTTTAAATTTACTTTGGCACT TAAAAAACCTCATTTCCAGATTTCTGGACAATCTCGGCTGCAGACATCTAAGCCTAACCTTTTGGTATCCTGAGT TTTTTCCCTCTCCTTCTCCTCACGCCCACCCCGCTTCTCTCGCACACGGTCATCTTTACATATCAAGAGAA AGCAAAAAGGTTCCAAGAGGTACTTTTCTTTTTAGAAAATCACCTTTTCTCCCCTAATTCTTCTGCAGAAGAAAA GAGGTTTCGAAAGAGGGAAAAGGAAAAAACAAGCCGGCTACGGTATCAGCCGGTCAGCCCAGGTGGAAAACGAGA GTGAAAGTAGGGCTTAACGGGGAGCGCACCGCCTCTTTCGAAAGCCGCTGGGCCACCACCAGTGCGTGAGCCTTG CTGGTTTACCAGCTCAATAAGTACTACACTGAGCGCTGTCAGGCGCGCAAGGCGGCCATCGCCAAAACCATCCGA GAGGTCTGTAAGGTGGTCTCGGACGTGCTCAAGGAAGTGGAGGTGCAGGAGCCTCGCTTCATCAGCTCCTTGAGC GAGATCGATGCCCGCTACGAGGGGCTCGAGGTCATTTCGCCCACCGAATTTGAGGTGGTGCTCTACCTAAACCAG ATGGGCGTCTTCAACTTCGTGGACGACGCTCGCTGCCCGGCTGCGCAGTGCTCAAACTGAGCGATGGGCGGAAG CGGAGCATGTCTCTCTGGGTCGAGTTCATCACGGCGTCGGGCTATCTCTCAGCGCGTAAGATCCGCTCGCGTTTC CAGACGCTGGTGGCCCAGGCGGTGGACAAGTGCAGCTATCGGGATGTGGTCAAGATGATCGCGGACACCAGCGAG GTCAAGTTGCGCATCAGGGAGCGCTATGTGGTGCAAATCACTCCGGCGTTCAAGTGCACCGGGATCTGGCCTCGC AGCGCGGCACAGTGGCCTATGCCCCACATCCCTTGGCCCGGCCCCAATCGGGTGGCCGAGGTCAAGGCCGAAGGG TTCAACTTGCTCTCGAAGGAGTGCTACTCGCTGACCGGCAAGCAGAGCTCGGCAGAGCGACGCCTGGGTGCTA CAGTTCGGGGAGGCGGAGAACCGCCTGCTGATGGGCGGCTGCCGAAACAAGTGCCTCTCAGTGCTGAAGACTCTG CGGGACCGCCACCTGGAGCTACCCGGCCAGCCGCTCAACAACTACCACATGAAGACGCTGCTGCTGTACGAGTGC . GAGAAACACCCACGAGAAACGGACTGGGACGAGTCGTGCCTGGGCGACCGGCTCAACGGCATCCTGCTGCAGCTC ATCTCCTGCCTGCAGTGCCGCCGCTGCCCTCACTACTTTCTGCCCAACCTCGACCTCTTTCAGGGCAAGCCCCAT TCGGCCCTGGAGAGCGCTGCCAAGCAGACCTGGAGGTTGGCCAGGGAAATTCTCACCAATCCCAAAAGCCTGGAC AAACTATAGGTGCTGGGGACTGCTTGAAAAGCGACACAAACGGGCGTGCTCTCTCAGACACAACTCAGCTAT AAACAGCAGAAACTCTGGACACAAACTTTTATGTAAGTCACCTGAAATAGGAATCCGGCAGAAGACCTTCATTAA TTAAGAAGCAAACAAAAGAGAGCCAACCCAACCAAAACAAATCACATTCTTGCACAAAAGTGATCGTTTTCTTCC AAACAATGTGAATTTAAAAGGTCACACAAAAGAAGCAATCGGGCTCCGCCACCACAAAATGAAACCCAAGGTACA TTTTCAAATCAATGTATAGTAGTTCCCCCCCCTTTTCCTTCTTTCCCCCCTATCCTTTTTCTCTCCACCCCATCCC CCCCCATTTCGTTTTGCTTTTGGTTGCCTGAATGTTGTCACCAAGTGAAAAAATTATTTAACTATATGTAAAAT

PCT/US2003/028547

1626/6881 FIGURE 1505

MIAAQAKLVYQLNKYYTERCQARKAAIAKTIREVCKVVSDVLKEVEVQEPRFISSLSEIDARYEGLEVISPTEFE
VVLYLNQMGVFNFVDDGSLPGCAVLKLSDGRKRSMSLWVEFITASGYLSARKIRSRFQTLVAQAVDKCSYRDVVK
MIADTSEVKLRIRERYVVQITPAFKCTGIWPRSAAQWPMPHIPWPGPNRVAEVKAEGFNLLSKECYSLTGKQSSA
ESDAWVLQFGEAENRLLMGGCRNKCLSVLKTLRDRHLELPGQPLNNYHMKTLLLYECEKHPRETDWDESCLGDRL
NGILLQLISCLQCRRCPHYFLPNLDLFQGKPHSALESAAKQTWRLAREILTNPKSLDKL

PCT/US2003/028547

FIGURE 1506

PCT/US2003/028547

FIGURE 1507

MAVGKNKRLTKGGKKGAKKKVVDPFSKKDWYDVKAPAMFNIRNIGKTLVTRTQGTKIASDGLKGRVFEVSLADLQ NDEVAFRKFKLITEDVQGKNCLTNFHGMDLTRDKMCSMVKKWQTMIEAHVDVKTTDGYLLRLFCVGFTKKRNNQI RKTSYAQHQQVRQIRKKMMEIMTREVQTNDLKEVVNKLIPDSIGKDIEKACQSIYPLHDVFVRKVKMLKKPKFEL GKLMELHGEGSSSGKATGDETGAKVERADGYEPPVQESV

PCT/US2003/028547

FIGURE 1508

AAGTCTACATGAAAAGGATGGTTTCTTGGAGCTTCCACAAACTTAAAACCATGAAACATCTATTATTGCTACTAT TGTGTGTTTTTCTAGTTAAGTCCCAAGGTGTCAACGACAATGAGGAGGGTTTCTTCAGTGCCCGTGGTCATCGAC CCCTTGACAAGAAGAGAGAGAGGCTCCCAGCCTGAGGCCTGCCCCACCGCCCATCAGTGGAGGTGGCTATCGGG CTGACCCAGACCTGGGGGTGTTGTGTCCTACAGGATGTCAGTTGCAAGAGGCTTTGCTACAACAGGAAAGGCCAA TGTATTTGCTGAAAGACCTGTGGCAAAAGAGGCAGAAGCAAGTAAAAGATAATGAAAATGTAGTCAATGAGTACT CCTCAGAACTGGAAAAGCACCAATTATATATAGATGAGACTGTGAATAGCAATATCGCAACTAACCTTCGTGTGC TTCGTTCAATCCTAGAAAACCTGAGAAGCAAAATACAAAAGTTAGAATCTGATGTCTCAGCTCAAATGGAATATT GTCGCACCCCATGCACTGTCAGTTGCAATATTCCTGTGGTGTCTGGCAAAGAATGTGAGGAAATTATCAGGAAAG GAGGTGAAACATCTGAAATGTATCTCATTCAACCTGACAGTTCTGTCAAACCGTATAGAGTATACTGTGACATGA ATACAGAAAATGGAGGATGGACAGTGATTCAGAACCGTCAAGACGGTAGTGTTGACTTTGGCAGGAAATGGGATC CATATAAACAGGGATTTGGAAATGTTGCAACCAACACAGATGGGAAGAATTACTGTGGCCTACCAGGTGAATATT GGCTTGGAAATGATAAAATTAGCCAGCTTACCAGGATGGGACCCACAGAACTTTTGATAGAAATGGAGGACTGGA AAGGAGACAAAGTAAAGGCTCACTATGGAGGATTCACTGTACAGAATGAAGCCAACAAATACCAGATCTCAGTGA CCATTCACAACGGCATGTTCTTCAGCACGTATGACAGAGACAATGACGGCTGGTTAACATCAGATCCCAGAAAAC AGTGTTCTAAAGAAGACGGTGGTGGATGGTGGTATAATAGATGTCATGCAGCCAATCCAAACGGCAGATACTACT GGGGTGGACAGTACACCTGGGACATGGCAAAGCATGGCACAGATGATGGTGTAGTATGGATGAATTGGAAGGGGT CATGGTACTCAATGAGGAAGATGAGTATGAAGATCAGGCCCTTCTTCCCACAGCAA<u>TAG</u>TCCCCAATACGTAGAT AAAACTCTCAAGCAGACGTGAGTGTGACTTTTTGAAAAAAGTATAGGATAAATTACATTAAAATAGCACATGATT TTCTTTTGTTTCTCATTTCTCTTGCTCACCAAGAAGTAACAAAAGTATAGTTTTGACAGAGTTGGTGTTCATA ATTTCAGTTCTAGTTGATTGCGAGAATTTTCAAATAAGGAAGAGGGGTCTTTTATCCTTGTCGTAGGAAAACCAT ACTTCCAAAAAGATTTATTAATTAAACCAGACTCTGTTGCAAT

PCT/US2003/028547

FIGURE 1509

MKRMVSWSFHKLKTMKHLLLLLLCVFLVKSQGVNDNEEGFFSARGHRPLDKKREEAPSLRPAPPPISGGGYRARP AKAAATQKKVERKAPDAGGCLHADPDLGVLCPTGCQLQEALLQQERPIRNSVDELNNNVEAVSQTSSSSFQYMYL LKDLWQKRQKQVKDNENVVNEYSSELEKHQLYIDETVNSNIATNLRVLRSILENLRSKIQKLESDVSAQMEYCRT PCTVSCNIPVVSGKECEEIIRKGGETSEMYLIQPDSSVKPYRVYCDMNTENGGWTVIQNRQDGSVDFGRKWDPYK QGFGNVATNTDGKNYCGLPGEYWLGNDKISQLTRMGPTELLIEMEDWKGDKVKAHYGGFTVQNEANKYQISVNKY RGTAGNALMDGASQLMGENRTMTIHNGMFFSTYDRDNDGWLTSDPRKQCSKEDGGGWWYNRCHAANPNGRYYWGG QYTWDMAKHGTDDGVVWMNWKGSWYSMRKMSMKIRPFFPQQ

PCT/US2003/028547

1631/6881 FIGURE 1510

CTACATGAAAAGGATGGTTTCTTGGAGCTTCCACAAACTTAAAACCATGAAACATCTATTATTGCTACTATTGTG
TGTTTTTCTAGTTAAGTCCCAAGGTGTCAACGACAATGAGGAGGTGAATTTTTTAAAGCATTATTATTATTAG
TAGTATTATTAATATAAGATGTAACATAATCATATTATGTGCTTATTTTAATGAAATTAGCATTGCTTATATGTA
TGAAATGGAATTGTTAACCTCTGACTTATTGTATTTAAAGAATGTTTCATAGTATTTCTTATATAAGATGGCTTA
GCTAATGTAAGATGTGTTTTTCTCACTTGCTATTCTGAGTACTGTGATTTTCATTTACTTCTAGCAATACAGG

PCT/US2003/028547

1632/6881 FIGURE 1511A

GAAAGACATCAATCTGCCTGCAAAGATTCAGACTGGCCCTTCTGCTCTGATGAAGACTGGAACTACAAATGCCCT TCACTATTTGAATATCAGAAGAACAATAAGGATTCTCATTCGTTGACCACTAATATAATGGAAATTTTGAGAGGC GATTTTTCCTCAGCCAATAACCGTGATAATACCTACAACCGAGTGTCAGAGGATCTGAGAAGCAGAATTGAAGTC ATGAAACGACTGGAGGTGGACATTGATATTAAGATCCGATCTTGTCGAGGGTCATGCAGTAGGGCTTTAGCTCGT AGAGATAGGCAACACTTACCACTGATAAAAATGAAACCAGTTCCAGACTTGGTTCCCGGAAATTTTAAGAGCCAG CTTCAGAAGGTACCCCCAGAGTGGAAGGCATTAACAGACATGCCGCAGATGAGAATGGAGTTAGAGAGACCTGGT GGAAATGAGATTACTCGAGGAGGCTCCACCTCTTATGGAACCGGATCAGAGACGGAAAGCCCCAGGAACCCTAGC AGTGCTGGAAGCTGGAACTCTGGGAGCTCTGGAACTTGGAAACCGAAACCCTGGGAGCTCTGGGACT GGAGGGACTGCAACCTGGAAACCTGGGAGCTCTGGACCTGGAAGTACTGGAAGCTGGAACTCTGGGAGCTCTGGA ACTGGAAGTACTGGAAACCAAAACCCTGGGAGCCCTAGACCTGGTAGTACCGGAACCTGGAATCCTGGCAGCTCT GAACGCGGAAGTGCTGGGCACTGGACCTCTGAGAGCTCTGTATCTGGTAGTACTGGACAATGGCACTCTGAATCT GGAAGTTTTAGGCCAGATAGCCCAGGCTCTGGGAACGCGAGGCCTAACAACCCAGACTGGGGCACATTTGAAGAG GAGCTCAGGACTGGTAAAGAGAAGGTCACCTCTGGTAGCACAACCACCACGCGTCGTTCATGCTCTAAAACCGTT ACTAAGACTGTTATTGGTCCTGATGGTCACAAAGAAGTTACCAAAGAAGTGGTGACCTCCGAAGATGGTTCTGAC TGTCCCGAGGCAATGGATTTAGGCACATTGTCTGGCATAGGTACTCTGGATGGGTTCCGCCATAGGCACCCTGAT GAAGCTGCCTTCTTCGACACTGCCTCAACTGGAAAAACATTCCCAGGTTTCTTCTCACCTATGTTAGGAGAGTTT GTCAGTGAGACTGAGTCTAGGGGCTCAGAATCTGGCATCTTCACAAATACAAAGGAATCCAGTTCTCATCACCCT GGGATAGCTGAATTCCCTTCCCGTGGTAAATCTTCAAGTTACAGCAAACAATTTACTAGTAGCACGAGTTACAAC AGAGGAGACTCCACATTTGAAAGCAAGAGCTATAAAATGGCAGATGAGGCCGGAAGTGAAGCCGATCATGAAGGA ACACATAGCACCAAGAGAGGCCATGCTAAATCTCGCCCTGTCAGAGACTGTGATGATGTCCTCCAAACACATCCT TCAGGTACCCAAAGTGGCATTTTCAATATCAAGCTACCGGGATCCAGTAAGATTTTTTCTGTTTATTGCGATCAA GACTACAAGAGAGGTTTCGGCAGCCTGAATGACGAGGGGGGAAGGAGAATTCTGGCTAGGCAATGACTACCTCCAC TTACTAACCCAAAGGGGCTCTGTTCTTAGGGTTGAATTAGAGGACTGGGCTGGGAATGAAGCTTATGCAGAATAT CACTTCCGGGTAGGCTCTGAGGCTGAAGGCTATGCCCTCCAAGTCTCCTCCTATGAAGGCACTGCGGGTGATGCT CTGATTGAGGGTTCCGTAGAGGAAGGGGCAGAGTACACCTCTCACAACAACATGCAGTTCAGCACCTTTGACAGG GATGCAGACCAGTGGGAAGAACTGTGCAGAAGTCTATGGGGGAGGCTGGTGGTATAATAACTGCCAAGCAGCC AATCTCAATGGAATCTACTACCCTGGGGGCTCCTATGACCCAAGGAATAACAGTCCTTATGAGATTGAGAATGGA GTGGTCTGGGTTTCCTTTAGAGGGGCAGATTATTCCCTCAGGGCTGTTCGCATGAAAATTAGGCCCCTTGTGACC CAA<u>TAG</u>GCTGAAGAAGTGGGAATGGGAGCACTCTGTCTTCTTTGCTAGAGAAGTGGAGAGAAAATACAAAAGGTA AAGCAGTTGAGATTCTCTACAACCTAAAAAATTCCTAGGTGCTATTTTCTTATCCTTTGTACTGTAGCTAAATGT CTTGAAGACTATTGGTTTGAGAACTTCTCTTCCCATACCACCCAAAATCATAATGCCATTGGAAAGCAAAAAGTT GTTTTATCCATTTGATTTGAATTGTTTTAAGCCAATATTTTAAGGTAAAACTCACTGAATCTAACCATAGCTGAC CTTTGTAGTAGAATTTACAACTTATAATTACAATGCACAATTTATAATTACAATATGTATTTATGTCTTTTGCTA TGGAGCAAATCCAGGAAGGCAAGAGAAACATTCTTTCCTAAATATAAATGAAAATCTATCCTTTAAACTCTTCCA AAACTATTTATGAATATTAAAAAAGACATAATTCACACATTAATAAACAATCTCCCAAGTATTGATTTAACTTC ATTTTTCTAATAATCATAAACTATATTCTGTGACATGCTAATTATTATTAAATGTAAGTCGTTAGTTCGAAAGCC TCTCACTAAGTATGATCTATGCTATATTCAAAATTCAACCCATTTACTTTGGTCAATATTTGATCTAAGTTGCAT CTTTAATCCTGGTGGTCTTGCCTTCTGATTTTTAATTTGTATCCTTTTCTATTAAGATATATTTGTCATTTTCTC

PCT/US2003/028547

1633/6881 FIGURE 1511B

TTGAATATGTATTAAAATATCCCAAGC

PCT/US2003/028547

FIGURE 1512

MFSMRIVCLVLSVVGTAWTADSGEGDFLAEGGGVRGPRVVERHQSACKDSDWPFCSDEDWNYKCPSGCRMKGLID EVNQDFTNRINKLKNSLFEYQKNNKDSHSLTTNIMEILRGDFSSANNRDNTYNRVSEDLRSRIEVLKRKVIEKVQ HIQLLQKNVRAQLVDMKRLEVDIDIKIRSCRGSCSRALAREVDLKDYEDQQKQLEQVIAKDLLPSRDRQHLPLIK MKPVPDLVPGNFKSQLQKVPPEWKALTDMPQMRMĖLERPGGNEITRGGSTSYGTGSETESPRNPSSAGSWNSGSS GPGSTGNRNPGSSGTGGTATWKPGSSGPGSTGSWNSGSSGTGSTGNQNPGSPRPGSTGTWNPGSSERGSAGHWTS ESSVSGSTGQWHSESGSFRPDSPGSGNARPNNPDWGTFEEVSGNVSPGTRREYHTEKLVTSKGDKELRTGKEKVT SGSTTTTRRSCSKTVTKTVIGPDGHKEVTKEVVTSEDGSDCPEAMDLGTLSGIGTLDGFRHRHPDEAAFFDTAST GKTFPGFFSPMLGEFVSETESRGSESGIFTNTKESSSHHPGIAEFPSRGKSSSYSKQFTSSTSYNRGDSTFESKS YKMADEAGSEADHEGTHSTKRGHAKSRPVRDCDDVLQTHPSGTQSGIFNIKLPGSSKIFSVYCDQETSLGGWLLI QQRMDGSLNFNRTWQDYKRGFGSLNDEGEGEFWLGNDYLHLLTQRGSVLRVELEDWAGNEAYAEYHFRVGSEAEG YALQVSSYEGTAGDALIEGSVEEGAEYTSHNNMQFSTFDRDADQWEENCAEVYGGGWWYNNCQAANLNGIYYPGG SYDPRNNSPYEIENGVVWVSFRGADYSLRAVRMKIRPLVTQ

PCT/US2003/028547

FIGURE 1513

GTCTAGGAGCCAGCCCCACCCTTAGAAAAG<u>A**TG**</u>TTTTCCATGAGGATCGTCTGCCTAGTTCTAAGTGTGGTGGGC GAAAGACATCAATCTGCCTGCAAAGATTCAGACTGGCCCTTCTGCTCTGATGAAGACTGGAACTACAAATGCCCT TCACTATTTGAATATCAGAAGAACAATAAGGATTCTCATTCGTTGACCACTAATATAATGGAAATTTTGAGAGGC GATTTTTCCTCAGCCAATAACCGTGATAATACCTACAACCGAGTGTCAGAGGATCTGAGAAGCAGAATTGAAGTC ATGAAACGACTGGAGGTGGACATTGATATTAAGATCCGATCTTGTCGAGGGTCATGCAGTAGGGCTTTAGCTCGT AGAGATAGGCAACACTTACCACTGATAAAAATGAAACCAGTTCCAGACTTGGTTCCCGGAAATTTTAAGAGCCAG CTTCAGAAGGTACCCCCAGAGTGGAAGGCATTAACAGACATGCCGCAGATGAGAATGGAGTTAGAGAGACCTGGT GGAAATGAGATTACTCGAGGAGGCTCCACCTCTTATGGAACCGGATCAGAGACGGAAAGCCCCAGGAACCCTAGC AGTGCTGGAAGCTGGAACTCTGGGAGCTCTGGACCTGGAAGTACTGGAAACCGAAACCCTGGGAGCTCTGGGACT GGAGGGACTGCAACCTGGAAACCTGGGAGCTCTGGACCTGGAAGTACTGGAAGCTGGAACTCTGGGAGCTCTGGA ACTGGAAGTACTGGAAACCAAAACCCTGGGAGCCCTAGACCTGGTAGTACCGGAACCTGGAATCCTGGCAGCTCT GAACGCGGAAGTGCTGGGCACTGGACCTCTGAGAGCTCTGTATCTGGTAGTACTGGACAATGGCACTCTGAATCT GGAAGTTTTAGGCCAGATAGCCCAGGCTCTGGGAACGCGAGGCCTAACAACCCAGACTGGGGGCACATTTGAAGAG GTGTCAGGAAATGTAAGTCCAGGGACAAGGAGAGAGTACCACACAGAAAAACTGGTCACTTCTAAAGGAGATAAA GAGCTCAGGACTGGTAAAGAGAAGGTCACCTCTGGTAGCACAACCACCACGCGTCGTTCATGCTCTAAAACCGTT ACTAAGACTGTTATTGGTCCTGATGGTCACAAAGAAGTTACCAAAGAAGTGGTGACCTCCGAAGATGGTTCTGAC TGTCCCGAGGCAATGGATTTAGGCACATTGTCTGGCATAGGTACTCTGGATGGGTTCCGCCATAGGCACCCTGAT GAAGCTGCCTTCTTCGACACTGCCTCAACTGGAAAAACATTCCCAGGTTTCTTCTCACCTATGTTAGGAGAGTTT GTCAGTGAGACTGAGTCTAGGGGCTCAGAATCTGGCATCTTCACAAATACAAAGGAATCCAGTTCTCATCACCCT GGGATAGCTGAATTCCCTTCCCGTGGTAAATCTTCAAGTTACAGCAAACAATTTACTAGTAGCACGAGTTACAAC AGAGGAGACTCCACATTTGAAAGCAAGAGCTATAAAATGGCAGATGAGGCCGGAAGTGAAGCCGATCATGAAGGA ACACATAGCACCAAGAGAGGCCATGCTAAATCTCGCCCTGTCAGAGGTATCCACACTTCTCCTTTGGGGAAGCCT TCCCTGTCCCCC<u>TAG</u>ACTAAGTTAAATATTTCTGCACAGTGTTCCCATGGCCCCTTGCATTTCCTTCTTAACTCT CTGTTACACGTCATTGAAACTACACTTTTTTGGTCTGTTTTTTGTGCTAGACTGTAAGTTCCTTGGGGGCAGGGCC ATGAATG

PCT/US2003/028547

1636/6881 FIGURE 1514

MFSMRIVCLVLSVVGTAWTADSGEGDFLAEGGGVRGPRVVERHQSACKDSDWPFCSDEDWNYKCPSGCRMKGLID EVNQDFTNRINKLKNSLFEYQKNNKDSHSLTTNIMEILRGDFSSANNRDNTYNRVSEDLRSRIEVLKRKVIEKVQ HIQLLQKNVRAQLVDMKRLEVDIDIKIRSCRGSCSRALAREVDLKDYEDQQKQLEQVIAKDLLPSRDRQHLPLIK MKPVPDLVPGNFKSQLQKVPPEWKALTDMPQMRMELERPGGNEITRGGSTSYGTGSETESPRNPSSAGSWNSGSS GPGSTGNRNPGSSGTGGTATWKPGSSGPGSTGSWNSGSSGTGSTGNQNPGSPRPGSTGTWNPGSSERGSAGHWTS ESSVSGSTGQWHSESGSFRPDSPGSGNARPNNPDWGTFEEVSGNVSPGTRREYHTEKLVTSKGDKELRTGKEKVT SGSTTTTRRSCSKTVTKTVIGPDGHKEVTKEVVTSEDGSDCPEAMDLGTLSGIGTLDGFRHRHPDEAAFFDTAST GKTFPGFFSPMLGEFVSETESRGSESGIFTNTKESSSHHPGIAEFPSRGKSSSYSKQFTSSTSYNRGDSTFESKS YKMADEAGSEADHEGTHSTKRGHAKSRPVRGIHTSPLGKPSLSP

PCT/US2003/028547

`1637/6881 FIGURE 1515

TGCTGACACTACAAGGCTCGGAGCTCCGGGCACTCAGACATCATGAGTTGGTCCTTGCACCCCCGGAATTTAATT CTCTACTTCTATGCTCTTTATTTCTCTCTCTAACATGTGTAGCATATGTTGCTACCAGAGACAACTGCTGCATC TTAGATGAAAGATTCGGTAGTTATTGTCCAACTACCTGTGGCATTGCAGATTTCCTGTCTACTTATCAAACCAAA GTAGACAAGGATCTACAGTCTTTGGAAGACATCTTACATCAAGTTGAAAACAAAACATCAGAAGTCAAACAGCTG ATAAAAGCAATCCAACTCACTTATAATCCTGATGAATCATCAAAACCAAATATGATAGACGCTGCTACTTTGAAG TCCAGGATAATGTTAGAAGAAATTATGAAATATGAAGCATCGATTTTAACACATGACTCAAGTATTCGATATTTG CAGGAAATATATATCAAATAATCAAAAGATTGTTAACCTGAAAGAGAAGGTAGCCCAGCTTGAAGCACAGTGC CAGGAACCTTGCAAAGACACGGTGCAAATCCATGATATCACTGGGAAAGATTGTCAAGACATTGCCAATAAGGGA GCTAAACAGAGCGGGCTTTACTTTATTAAACCTCTGAAAGCTAACCAGCAATTCTTAGTCTACTGTGAAATCGAT GGGTCTGGAAATGGATGGACTGTTTTCAGAAGAGACTTGATGGCAGTGTAGATTTCAAGAAAAACTGGATTCAA TATAAAGAAGGATTTGGACATCTGTCTCCTACTGGCACAACAGAATTTTGGCTGGGAAATGAGAAGATTCATTTG ATAAGCACACAGTCTGCCATCCCATATGCATTAAGAGTGGAACTGGAAGACTGGAATGGCAGAACCAGTACTGCA GACTATGCCATGTTCAAGGTGGGACCTGAAGCTGACAAGTACCGCCTAACATATGCCTACTTCGCTGGTGGGGAT GCTGGAGATGCCTTTGATGGCTTTGATTTTGGCGATGATCCTAGTGACAAGTTTTTCACATCCCATAATGGCATG ATGAACAAGTGTCACGCTGGCCATCTCAATGGAGTTTATTACCAAGGTGGCACTTACTCAAAAGCATCTACTCCT AATGGTTATGATAATGGCATTATTTGGGCCACTTGGAAAACCCGGTGGTATTCCATGAAGAAAACCACTATGAAG ATAATCCCATTCAACAGACTCACAATTGGAGAAGGACAGCAACACCCCTGGGGGGAGCCAAACAGGCTGGAGAC GTT<u>TAA</u>AAGACCGTTTCAAAAGAGATTTACTTTTTTAAAGGACTTTATCTGAACAGAGAGATATAATATTTTTCC TATTGGACAATGGACTTGCAAAGCTTCACTTCATTTTAAGAGCAAAAGACCCCCATGTTGAAAAACTCCATAACAGT TTTATGCTGATGATAATTTATCTACATGCATTTCAATAAACCTTTTGTTTCCTAAGACT

PCT/US2003/028547

1638/6881 FIGURE 1516

MSWSLHPRNLILYFYALLFLSSTCVAYVATRDNCCILDERFGSYCPTTCGIADFLSTYQTKVDKDLQSLEDILHQ VENKTSEVKQLIKAIQLTYNPDESSKPNMIDAATLKSRIMLEEIMKYEASILTHDSSIRYLQEIYNSNNQKIVNL KEKVAQLEAQCQEPCKDTVQIHDITGKDCQDIANKGAKQSGLYFIKPLKANQQFLVYCEIDGSGNGWTVFQKRLD GSVDFKKNWIQYKEGFGHLSPTGTTEFWLGNEKIHLISTQSAIPYALRVELEDWNGRTSTADYAMFKVGPEADKY RLTYAYFAGGDAGDAFDGFDFGDDPSDKFFTSHNGMQFSTWDNDNDKFEGNCAEQDGSGWWMNKCHAGHLNGVYY QGGTYSKASTPNGYDNGIIWATWKTRWYSMKKTTMKIIPFNRLTIGEGQQHHLGGAKQAGDV

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PCT/US2003/028547

1639/6881 FIGURE 1517

 $\tt TGCTGACACTACAAGGCTCGGAGCTCCGGGCACTCAGACATC\underline{ATG} AGTTGGTCCTTGCACCCCCGGAATTTAATT$ CTCTACTTCTATGCTCTTTTATTTCTCTCTCAACATGTGTAGCATATGTTGCTACCAGAGACAACTGCTGCATC TTAGATGAAAGATTCGGTAGTTATTGTCCAACTACCTGTGGCATTGCAGATTTCCTGTCTACTTATCAAACCAAA ATAAAAGCAATCCAACTCACTTATAATCCTGATGAATCATCAAAACCAAATATGATAGACGCTGCTACTTTGAAG TCCAGGATAATGTTAGAAGAATTATGAAATATGAAGCATCGATTTTAACACATGACTCAAGTATTCGATATTTG CAGGAAATATATATATCAAATAATCAAAAGATTGTTAACCTGAAAGAGAAGGTAGCCCAGCTTGAAGCACAGTGC CAGGAACCTTGCAAAGACACGGTGCAAATCCATGATATCACTGGGAAAGATTGTCAAGACATTGCCAATAAGGGA GCTAAACAGAGCGGGCTTTACTTTATTAAACCTCTGAAAGCTAACCAGCAATTCTTAGTCTACTGTGAAATCGAT GGGTCTGGAAATGGATGGACTGTTTTCAGAAGAGACTTGATGGCAGTGTAGATTTCAAGAAAAACTGGATTCAA TATAAAGAAGGATTTGGACATCTGTCTCCTACTGGCACAACAGAATTTTGGCTGGGAAATGAGAAGATTCATTTG ATAAGCACACAGTCTGCCATCCCATATGCATTAAGAGTGGAACTGGAAGACTGGAATGGCAGAACCAGTACTGCA GACTATGCCATGTTCAAGGTGGGACCTGAAGCTGACAAGTACCGCCTAACATATGCCTACTTCGCTGGTGGGGAT GCTGGAGATGCCTTTGATGGCTTTGATTTTGGCGATGATCCTAGTGACAAGTTTTTCACATCCCATAATGGCATG ATGAACAAGTGTCACGCTGGCCATCTCAATGGAGTTTATTACCAAGGTGGCACTTACTCAAAAGCATCTACTCCT AATGGTTATGATAATGGCATTATTTGGGCCACTTGGAAAACCCGGTGGTATTCCATGAAGAAAACCACTATGAAG ATAATCCCATTCAACAGACTCACAATTGGAGAAGGACAGCAACACCACCTGGGGGGAGCCAAACAGGTCAGACCA GAGCACCCTGCGGAAACAGAATATGACTCACTTTACCCTGAGGATGATTTG<u>TAG</u>AAAATTAACTGCTAACTTCTA TTCTATTAGGACATTTAGCCTTCAATGGAAATTAAAACTCATTTAGGACTGTATTTCCAAATTACTGATATCAG AGTTATTTAAAAATTGTTTATTTGAGGAGATAACATTTCAACTTTGTTCCTAAATATAATAATAATAAATGATTG ACTTT

PCT/US2003/028547

FIGURE 1518

MSWSLHPRNLILYFYALLFLSSTCVAYVATRDNCCILDERFGSYCPTTCGIADFLSTYQTKVDKDLQSLEDILHQ VENKTSEVKQLIKAIQLTYNPDESSKPNMIDAATLKSRIMLEEIMKYEASILTHDSSIRYLQEIYNSNNQKIVNL KEKVAQLEAQCQEPCKDTVQIHDITGKDCQDIANKGAKQSGLYFIKPLKANQQFLVYCEIDGSGNGWTVFQKRLD GSVDFKKNWIQYKEGFGHLSPTGTTEFWLGNEKIHLISTQSAIPYALRVELEDWNGRTSTADYAMFKVGPEADKY RLTYAYFAGGDAGDAFDGFDFGDDPSDKFFTSHNGMQFSTWDNDNDKFEGNCAEQDGSGWWMNKCHAGHLNGVYY QGGTYSKASTPNGYDNGIIWATWKTRWYSMKKTTMKIIPFNRLTIGEGQQHHLGGAKQVRPEHPAETEYDSLYPE DDL

PCT/US2003/028547

FIGURE 1519

PCT/US2003/028547

FIGURE 1520

PCT/US2003/028547

FIGURE 1521

MVTNVNQNTSGALSLNQLPHTHMSKIQIPLANAYPIANADAQGCTHWLRGLPSERCARGGKLLLGTSTITVDQRI ALKEVQATWLLHKYLYHTYYYRLNIRVVCAQDTRVNTAPIPEMYSFYMCPCFRPELRGYSMDTSLIKHQCNHHCK QANRPDSVPREILAILAEELNKTKPIWTRNPDDITNEEYREFYKSLTNDWEDHLKKKNNIKLYVCRVFITDNCEE LIPEYLNFIRVLVDSEDLPLNISHKMLQQSKILKVIRKNLVKKCLELFTELAEDKENYKKFYEQFSENIKLGIHE DSQNQKKLSELLRYYTSASGDEMVSLKDYCTRIRKTRNES

PCT/US2003/028547

FIGURE 1522

GATGTGGCCCGTGGCCTAGCTCGTCAAGTTGCCGTGGCGCGGAGAACTCTGCAAAACAAGAGGCTGAGGATTGCG TTAGAGATAAACCAGTTCACGCCGGAGCCCCGTGAGGGAAGCGTCTCCGTTGGGTCCGGCCGCTCTGCGGGACTC TGAGGAAAAGCTCGCACCAGGTGGACGCGGATCTGTCAACATCGGTAAAGGAGACCCCAACAAGCCGCGGGGCAA AATGTCCTCGTACGCCTTCTTCGTGCAGACCTGCCGGGAAGAGCACAAGAAGAAAACACCCGGACTCTTCCGTCAA TTTCGCGGAATTCTCCAAGAAGTGTTCGGAGAGATGGAAGACCATGTCTGCAAAGGAGAAGTCGAAGTTTGAAGA TATGGCAAAAGTGACAAAGCTCGCTATGACAGGGAGATGAAAAATTACGTTCCTCCCAAAGGTGATAAGAAGGG GAAGAAAAAGGACCCCAATGCTCCTAAAAAGGCCACCATCTGCCTTCTTCCTGTTTTGCTCTGAACATCGCCCAAA GATCAAAAGTGAACACCCTGGCCTATCCATTGGGGATACTGCAAAGAAATTGGGTGAAATGTGGTCTGAGCAGTC AGCCAAAGATAAACAACCATATGAACAGAAAGCAGCTAAGCTAAAGGAGAAATATGAAAAGGATATTGCTGCATA TATCCTTTAATGATGCGTGTGGAATGTGTGTGTGTGTCTCAGGCAATTATTTTGCTAAGAATGTGAATTCAAGTGC AGCTCAATACTAGCTTCAGTATAAAAACTGTACAGATTTTTGTATAGCTGATAAGATTCTCTGTAGAGAAAATAC TTTTAAAAAATGCAGGTTGTAGCTTTTTGATGGGCTACTCATACAGTTAGATTTTACAGCTTCTGATGTTGAATG TTCCTAAATATTTAATGGTTTTTTTAATTTCTGTGTGTATGGTAGCACAGCAAACTTGTAGGAATTAGTATCAAT

PCT/US2003/028547

1645/6881 FIGURE 1523

MGKGDPNKPRGKMSSYAFFVQTCREEHKKKHPDSSVNFAEFSKKCSERWKTMSAKEKSKFEDMAKSDKARYDREM KNYVPPKGDKKGKKKDPNAPKRPPSAFFLFCSEHRPKIKSEHPGLSIGDTAKKLGEMWSEQSAKDKQPYEQKAAK LKEKYEKDIAAYRAKGKSEAGKKGPGRPTGSKKKNEPEDEEEEEEEEDEDEEE

PCT/US2003/028547

1646/6881 FIGURE 1524

CGCTGAGGCAGGGGCCGGGGCGGGGCGGGGGCTGCGCGCACGCTGGGGCGCGTGGAGGGGCGCGGAGGG CGAAATGAGTCTGGTAGGTGGTTTTCCCCACCACCGGTGGTGCACCACGAGGGCTACCCGTTTGCCGCCGCCGC CCACCCGAGATGTCGCCCCCGACTACAGCATGGCCCTGTCCTACAGCCCCGAGTATGCCAGCGGCGCCCGG GCGCCGAGGCACCGCCAACCGCAAGGAGCGCGCAGGACTCAGAGCATCAACAGCGCCTTCGCCGAACTGCGCGA GTGCATCCCCAACGTACCCGCCGACACCAAACTCTCCAAAATCAAGACCCTGCGCCTGGCCACCAGCTACATCGC CTACCTCATGGACCTGCTGGCCAAGGACGACCAGAATGGCGAGGCGGAGGCCTTCAAGGCAGAGATCAAGAAGAC CGACGTGAAAGAGGAGAAGAAGAAGGAGCTGAACGAAATCTTGAAAAGCACAGTGAGCAACGACAAGAA AACCAAAGGCCGGACGGGCTGGCCGCAGCACGTCTGGGCCCTGGAGCTCAAGCAGTGAGGAGGAGGAGAAGGAGG AGGAGGAGAGCGCGAGTGAGCAGGGGCCAAGGCGCCAGATGCAGACCCAGGACTCCGGAAAAAGCCGTCCGCGCTC ACGAAGAGGACACTCCCGTGTGCAGGCCGAATCAGACCCGGCGTGGGCGAATTCAGAAGTGCCCAGGGAGAGACA AGCTAGAGGCTCTGCGGACTTCTGCGGGCGGCTGACAACGCGAGGGCGAGGGGAGAAAGCCATCAGGTCCTAGAC GTGGAAGAAGGAGCCTACCAAAGTGTTGGAGTAAAC

PCT/US2003/028547

1647/6881 FIGURE 1525

PCT/US2003/028547

FIGURE 1526

GGAGGCAAACAACCCATCTCTTGGAGAATCCACACTTCGTTTCTTCTAGGTCCAGCCTAAATGTTACCTCCTC GTTTCTTGACAACCTAATCAATGCATTGAACAAAGGAGATGTTTAGACAACCCATATAAAATGAATAAGAGAAAT AGGGTGAATACCGTCTACCCCAATTGCAATCAGATTAGTTTCCTTTATTTTGAAAACGATTAGAACTAGTAGAGG AGTTAGATGTGGCCCACTAGGGAACAAATTTTCATCTCCAAGCCGTCCTCTGGCTCGATCGGGTCTGCACTGGGT CTGCATCAACTTGCGCTGGCTCAGAGGGAGGCTCAGCCCCAGCCTGGCCTTCCTGGTGCCCAACCATCCT GAGCAGGGCCGACTCTAGGCACCCCACGATTAGCTGAGTGATCTAGGGCAAGGACCTAGGCGTCTCTAAGTCTTA GTTTCCCCATCTGAACA<u>ATG</u>TGGATAATGACACGTACCTGGGGTGGGCAGGCTAGAGTAAATGGGAAAATCAAAG CGCCAGCCAGAGCGGGTCGCACTGTTAGTTCCTGTATTTTCTCCTCCTGCCTCTGGTTTCTTCCGTTCCGTTCTA GCTGCCTGAAGACCCAGCCCGACAGCGATGCCTGTCAGCCCGCGTCGCCCACCAGGGCAGCTGCTCTCCCAACTC GCATGGGGGGCACCACCCCGCCTCGGTGCCCTAGAGCTGAGCCGCGGCTCCACGGGGATCGCCAGGGCCT CAGCCCTCGCGGCCGGCGCGCGGGGTGTTGCGGGGCAGGGACCAGAGCGCGATCAGAGCGGCCACCCCCGATT CCCCAGCCTCTTCTCGGTTCCCCACACCCAGGAGGCCGGTTCTCCGCCGCTCAGGCTGGGAGAGGTCACCGCTC CGGGCAGGGTGGACCCCCAGCTCCGGCAGGAGGACCTTTCGCCGGAGGCGAGCAGGAAGGGGTTAACCATGAGC CTCCCACCTCACCTCCCAGACCCTGGTGCCGGGCTAAGGCCTCCGCTTCCCTCGAGGTCTCATTAGGAAACC CTCACCGCTATTTTCAACATTTCCTCAATCAAGTGCCTTTAAATAGAGCTGCACAAACAGATTGGCGGCAAAAGC GTAGATCTTGTCACGATTGAGACCAATCCAGTATTTCAGCCTTGTTTGCTTTGCAATTACGGGTTGGCTTGTGGC CCAGGGCCGCGGGCACGCAGAGCTGTGTTGAAGGACATACTTTTCAGGTTCCTGACAGTCACTGAGCTATACGCA ATAATAAAGTGCGTGATTCGCGTGTGGAAACCAGTGTCGTGTCCTTACCGGCTTCCTTTTCTGTCCACCTTCCCT CTCTCTTCTACCTCCGTCTCGCTTTTCTTCAGTGCATGTTAGCGGTTTGCTGGATTTCCCTTCTCCCTCGCTGTT CAACTGCTAGCATGATTTGTTACATTTTCCACAGCTGTTTATTCTTGTTTGACTTTTTGTACAAAGTCACTTTAA TTTAATTCTTTGGAGATGGCTCTTCTGTGTAAATCAGCTGCTGGGTGCGTTCGGTCACCTCGTAGGCCAGCCTAG TTTGTATCAGCAGAACAGTAGTGGACTCGACTCAGGTCGTAAGCCTTATATTTCACAGACAATTAAATCTTGGCT GCTGTTGAACAAAACTGTAATATTTACTTTGTTCTATACCGAGAAGCACTTTTAAAGT

PCT/US2003/028547

1649/6881 FIGURE 1527

 ${\tt MWIMTRTWGGQARVNGKIKAPARAGRTVSSCIFSSCLWFLPFRSSCLKTQPDSDACQPASPTRAAALPTRMGGTTPPRCPRAERSRGSTGIARASALAAGGAGVLRGRDQSAIRAATPDLGRQLSSHCDGHWGAPSILVKFSL}$

PCT/US2003/028547

FIGURE 1528

GAAGGAGGAGGTGCCAAATCACTTATAAATGGTGCTGAAGCAGGACCCGAAGCCTAAATTCCAGGAGGGTGAGCG AGTGCTGTGGTTTCATGGGCCTCTGCTTTATGATGCAAAGTGTGTAAAGGTTGCCATAAAGGACAAAAAGTGAAA TACTTTATACATTACAGTGGTTGGAATAAAATTGGGATGAGTGGGTTCCGGAGAGCAGAGTACTCAAATATGTG ${\tt GACACCAATTTGCAGAAACAGCGAGAACTTCAAAAAGCCAATCAGGAGCAGTATGCAGAGGGGAAG{\color{red} {\bf ATC}}{\bf ATC}{\bf ATC$ CCTACTGTTGAAAATGAGGAAACATTCATGAACAGAGTTGAAGTTAAAGTAAAGATTCCTGAAGAGCTAAAACCA TGGCTTGTTGATGACTGGGACTTAATTACCAGGCAAAAACAGCTCTTCTATCTTCCTGCCGAGAAGAATGTGGAT TCCATTCTTGAGGACTATGCAAATTACAAGAAATCTCATGGAAACACAGATAATAAGGAGTATGCAGTTAATGAA GTTGTGGCAGGGATAAAAGAATACTTCAACCTAATGTTGGGCACCCAGCTACTCAACAAATTTGAGAGACCACAG TATGCCGAAATTCTTGCAGATTGTCCCGATGCACCCATGTCCCAGGTGTATGGAGTGCCACATCTCCTGAGATTA TCTGTACAAATTGGAGCAATGTTGGCCTATACACCTCTGAATGAGAAGAGCCTTGCTTTATTACTCAATTATCTT CACGATTTCCTAAAGTACCTGGCAAAGAATTCTGCAACTTTGTTTAGTGCCAGCGATTATGAAGTGGCTCTTCCT ${\tt GAGTACCATCGGAAAGCTGTG}{\color{blue}{\bf TGA}}{\tt GAGGCACTCTCACTCACTTATGTCTGGATCTCCATAAACACATTTTTGTTC}$ TTAGTCTATCTCTTGTACAAACGATGTGCTTTGAAGATGTTAGTGTATAACAATTGATGTTTTCTGTTTGA CCAGTGTTTTCAATGATGGACAACACAGGGATATGCTGTAGAGTGTTTTATTGCCTAGTTGACAAAGCTGCTTTT GAATGCTGGTGGTTCTATTCCTTTAACACTATGCATTTTTATAATACGTGTTAATGCTACATGACAAAATGCTCT AATGGTGCTTAAAGTAAAGAGCCCATCCTTTGCAAGTCATCCATGTTGCTACTTAGGCATTTTATCTTGGCTCAA ATTGTTGAAGAATGGCTTGTTTCACAGTTTTTGTATTTGTGTCTAATGCACGTTTTAACATGATAGATGCAATGC ATTGTGTAGCTACTTTTCTGGAAAAGTCAATCTTTTAGGAATTGTTTTTCAGATCTTCATTAAATTTTTTCCTTA **AATTTC**

PCT/US2003/028547

FIGURE 1529

MRWAAPGKKTSGLQQKNIEVKTKKNKQKTPGNGDGGSTSETPQPPRKKRAQVDPTVENEETFMNRVEVKVKIPEE LKPWLVDDWDLITRQKQLFYLPAEKNVDSILEDYANYKKSHGNTDNKEYAVNEVVAGIKEYFNLMLGTQLLNKFE RPQYAEILADCPDAPMSQVYGVPHLLRLSVQIGAMLAYTPLNEKSLALLLNYLHDFLKYLAKNSATLFSASDYEV ALPEYHRKAV WO 2004/030615 PCT/US2003/028547

1652/6881 FIGURE 1530A

CTGGGCGGCGGGGCGGGAGGGGCGCGGGAGCGGCTCGTGCGGCAGGTACCATGCGGACGCGCGAGCCCGGC GAGGGCCCCGGCAGGCCCGGTCCCTGCTCGGGGGCGCGCTGAGACGGCGGGTGAGCTCCACGAGAGCGCCGTCGC CACTTCGGGCCAACTTTGCGATTCCCGACAGTTAAGCAATGGGGAGACATTTGGCTTTGCTCCTGCTTCTGCTCC TTCTCTTCCAACATTTTGGAGACAGTGATGGCAGCCAACGACTTGAACAGACTCCTCTGCAGTTTACACACCTCG AGTACAACGTCACCGTGCAGGAGAACTCTGCAGCTAAGACTTATGTGGGGCCATCCTGTCAAGATGGGTGTTTACA TTACACATCCAGCGTGGGAAGTAAGGTACAAAATTGTTTCCGGAGACAGTGAAAACCTGTTCAAAGCTGAAGAGT ACATTCTCGGAGACTTTTGCTTTCTAAGAATAAGGACCAAAGGAGGAAATACAGCTATTCTTAATAGAGAAGTGA AGGATCACTACACATTGATAGTGAAAGCACTTGAAAAAAATACTAATGTGGAGGCGCGAACAAAGGTCAGGGTGC CTATAAGGACCAGTATCGCAAGAGTCAGCGCCACGGATGCAGACATAGGAACCAACGGGGAATTTTACTACAGTT TTAAAGATCGAACAGATATGTTTGCTATTCACCCAACCAGTGGTGATAGTGTTAACTGGTAGACTTGATTACC TAGAGACCAAGCTCTATGAGATGGAAATCCTCGCTGCGGACCGTGGCATGAAGTTGTATGGGAGCAGTGGCATCA CACCATCAGAACTGGACAGGGACCCAGCATATGCAATTGTGACAGTGGATGACTGCGATCAGGGTGCCAATGGTG ACATAGCATCTTTAAGCATCGTGGCAGGTGACCTTCTCCAGCAGTTTAGAACAGTGAGGTCCTTTCCAGGGAGTA AGGAGTATAAAGTCAAAGCCATCGGTGGCATTGATTGGGACAGTCATCCTTTCGGCTACAATCTCACACTACAGG CTAAAGATAAAGGAACTCCGCCCCAGTTCTCTTCTGTTAAAGTCATTCACGTGACTTCTCCACAGTTCAAAGCCG GGCCAGTCAAGTTTGAAAAGGATGTTTACAGAGCAGAAATAAGTGAATTTGCTCCTCCCAACACACCCTGTGGTCA TGGTAAAGGCCATTCCTGCTTATTCCCATTTGAGGTATGTTTTTAAAAGTACACCTGGAAAAGCTAAATTCAGTT TAACAACAAGTGACAGAAAAGCGTCCACCAAGGTCTTGGTGAAAGTCTTAGGTGCAAATAGCAATCCCCCTGAAT TTACCCAGACAGCGTACAAAGCTGCTTTTGATGAGAACGTGCCCATTGGTACTACTGTCATGAGCCTGAGTGCCG TAGACCCTGATGAGGGTGAGAACGGGTACGTGACATACAGTATCGCAAATTTAAATCATGTGCCGTTTGCGATTG ACCATTTCACTGGTGCCGTGAGTACGTCAGAAAACCTGGACTACGAACTGATGCCTCGGGTTTATACTCTGAGGA TTCGTGCATCAGACTGGGGCTTGCCGTACCGCCGGGAAGTCGAAGTCCTTGCTACAATTACTCTCAATAACTTGA ATGACAACACCTTTGTTTGAGAAAATAAATTGTGAAGGGACAATTCCCAGAGATCTAGGCGTGGGAGAGCAAA TAACCACTGTTTCTGCTATTGATGCAGATGAACTTCAGTTGGTACAGTATCAGATTGAAGCTGGAAATGAACTGG TGTCTTTCCACAGTCTGAGAATCACAGCTACAGATGGAGAAAATTTTGCCACACCATTATATATCAACATAACAG TGGCTGCCAGTCACAAGCTGGTAAACTTGCAGTGTGAAGAGACTGGTGTTGCCAAAATGCTGGCAGAGAAGCTCC TGCAGGCAAATAAATTACACAACCAGGGAGAGGTGGAGGATATTTTCTTCGATTCTCACTCTGTCAATGCTCACA TACCGCAGTTTAGAAGCACTCTTCCGACTGGTATTCAGGTAAAGGAAAACCAGCCTGTGGGTTCCAGTGTAATTT TCATGAACTCCACTGACCTTGACACTGGCTTCAATGGAAAACTGGTCTATGCTGTTTCTGGAGGAAATGAGGATA GTTGCTTCATGATTGATATGGAAACAGGAATGCTGAAAATTTTATCTCCTCTTGACCGTGAAACAACAGACAAAT ACACCCTGAATATTACCGTCTATGACCTTGGGATACCCCAGAAGGCTGCGTGGCGTCTTCTACATGTCGTGGTTG ATAGTGAAATCATCCAGGTTGAAGCCACAGATAAAGACCTGGGGCCCAACGGACACGTGACGTACTCAATTGTTA CAGACACAGACACATTTCAATTGACAGCGTGACGGGTGTTGTTAACATCGCACGCCCTCTGGATCGAGAGCTGC AGCATGAGCACTCCTTAAAGATTGAGGCCAGGGACCAAGCCAGAGAAGAGCCTCAGCTGTTCTCCACTGTCGTTG TGAAAGTATCACTAGAAGATGTTAATGACAACCCACCTACATTTATTCCACCTAATTATCGTGTGAAAGTCCGAG AGGATCTTCCAGAAGGAACCGTCATCATGTGGTTAGAAGCCCACGATCCTGATTTAGGTCAGTCTGGTCAGGTGA GATACAGCCTTCTGGACCACGGAGAAGGAAACTTCGATGTGGATAAACTCAGTGGAGCAGTTAGGATCGTCCAGC AGTTGGACTTTGAGAAGAAGCAAGTGTATAATCTCACTGTGAGGGCCAAAGACAAGGGAAAGCCAGTTTCTCTGT TGGAAAAGGGGACAGTGAAAGAAGATGCACCTGTTGGTTCATTGGTAATGACGGTGTCGGCTCATGATGAGGACG CCAGAAGAGATGGGGAGATCCGATACTCCATTAGAGATGGCTCTGGCGTTGGTGTTTTCAAAATAGGTGAAGAGA CAGGTGTCATAGAGACGTCAGATCGACTGGACCGTGAATCGACCTCCCATTATTGGCTAACAGTCTTTGCAACCG ATCAGGGTGTCGTGCCTCTTTCATCGTTCATAGAGATCTACATAGAGGTTGAGGATGTCAATGACAATGCACCAC

PCT/US2003/028547

1653/6881 FIGURE 1530B

AGACATCAGAGCCTGTTTATTACCCAGAAATCATGGAAAATTCTCCTAAAGATGTATCTGTGGTCCAGATCGAGG CATTTGATCCAGATTCGAGCTCTAATGACAAGCTCATGTACAAAATTACAAGTGGAAATCCACAAGGATTCTTTT CAATACATCCTAAAACAGGTCTCATCACAACTACGTCAAGGAAGCTAGACCGAGAACAGCAAGATGAACACATAT TAGAGGTTACTGTGACAGACAATGGTAGTCCCCCCAAATCAACCATTGCAAGAGTCATTGTGAAAATCCTTGATG AAAATGACAACCACAGTTTCTGCAAAAGTTCTACAAAATCAGACTCCCTGAGCGGGAAAAGCCAGACCGAG AAAGAAATGCCAGACGGGAGCCGCTCTATCACGTCATAGCCACCGACAAGGATGAGGGCCCCAATGCAGAAATCT CCTACAGCATCGAAGACGGGAATGAGCATGGCAAATTTTTCATCGAACCGAAAACTGGAGTGGTTTCGTCCAAGA GGTTTTCAGCAGCTGGAGAATATGATATTCTTTCAATTAAGGCAGTTGACAATGGTCGCCCTCAAAAGTCATCAA CCACCAGACTCCATATTGAATGGATCTCCAAGCCCAAACCGTCCCTGGAGCCCATTTCATTTGAAGAATCATTTT TTACCTTTACTGTGATGGAAAGTGACCCCGTTGCTCACATGATTGGAGTAATATCTGTGGAGCCTCCTGGCATAC CCCTTTGGTTTGACATCACTGGTGGCAACTACGACAGTCACTTCGATGTGGACAAGGGAACTGGAACCATCATTG TTGCCAAACCTCTTGATGCAGAACAGAAGTCAAACTACAACCTCACAGTCGAGGCTACAGATGGAACCACCACTA TCCTCACTCAGGTATTCATCAAAGTAATAGACACAAATGACCATCGTCCTCAGTTTTCTACATCAAAGTATGAAG TTGTTATTCCTGAAGATACAGCGCCAGAAACAGAAATTTTGCAAATCAGTGCTGTGGATCAGGATGAGAAAAACA AACTAATCTACACTCTGCAGAGCAGTAGAGATCCACTGAGTCTCAAGAAATTTCGTCTTGATCCTGCAACCGGCT CTCTCTATACTTCTGAGAAACTGGATCATGAAGCTGTTCACCAGCACACCCTCACGGTCATGGTACGAGATCAAG ATGTGCCTG'IAAAACGCAACTTTGCAAGGATTGTGGTCAATGTCAGCGACACGAATGACCACGCCCCGTGGTTCA CCGCTTCCTCCTACAAAGGGCGGGTTTATGAATCGGCAGCCGTTGGCTCAGTTGTGTTGCAGGTGACGGCTCTGG TTATGATTGATCCTGTCTTGGGCTCTATTAAAACTGCCAAAGAATTAGATCGAAGTAACCAAGCGGAGTATGATT TAATGGTAAAAGCTACAGATAAGGGCAGTCCACCAATGAGTGAAATAACTTCTGTGCGTATCTTTGTCACAATTG CTGACAACGCCTCTCCGAAGTTTACATCAAAAGAATATTCTGTTGAACTTAGTGAAACTGTCAGCATTGGGAGTT TCGTTGGGATGGTTACAGCCCATAGTCAATCATCAGTGGTGTATGAAATAAAAGATGGAAATACAGGTGATGCTT TTGATATTAATCCACATTCTGGAACTATCATCACTCAGAAAGCCCTGGACTTTGAAACTTTGCCCATTTACACAT TGATAATACAAGGAACTAACATGGCTGGTTTGTCCACTAATACAACGGTTCTAGTTCACTTGCAGGATGAGAATG ACAACGCCCCAGTTTTTATGCAGGCAGAATATACAGGACTCATTAGTGAATCAGCCTCAATTAACAGCGTGGTCC TAACAGACAGGAATGTCCCACTGGTGATTCGAGCAGCTGATGCTGATAAAGACTCAAATGCTTTGCTTGTATATC ACATTGTTGAACCATCTGTACACACATATTTTGCTATTGATTCTAGCACTGGTGCTATTCATACAGTACTAAGTC TGGACTATGAAGAAACAAGTATTTTTCACTTTACCGTCCAAGTGCATGACATGGGAACCCCACGTTTATTTGCTG AGTATGCAGCGAATGTAACAGTACATGTAATTGACATTAATGACTGCCCCCCTGTGTTTTGCCAAGCCATTATATG AAGCATCTCTTTTGTTACCAACATACAAAGGAGTAAAAGTCATCACAGTAAATGCTACAGATGCTGATTCAAGTG CATTCTCACAGTTGATTTACTCCATCACCGAAGGCAACATCGGGGGAGAAGTTTTCTATGGACTACAAGACTGGTG CTCTCACTGTCCAAAACACTCAGTTAAGAAGCCGCTACGAGCTAACCGTTAGAGCTTCCGATGGCAGATTTG AGCCTTTGTTTTATCACATCCTCAACCCAGATCGCAGATTTAAAATAAGCCGCACTTCAGGAGTTCTGTCAACCA CTGGCACGCCCTTCGATCGTGAGCAGCAGGAGGCGTTTGATGTGGTTGTAGAAGTGACAGAGGAACATAAGCCTT CTGCAGTGGCCCACGTTGTCGTGAAGGTCATTGTAGAAGACCAAAATGATAATGCGCCGGTGTTTGTCAACCTTC CCTACTACGCCGTTGTTAAAGTGGACACTGAGGTGGGCCATGTCATTCGCTATGTCACTGCTGTAGACAGAGACA GTGGCAGAAACGGGGAAGTGCATTACTACCTCAAGGAACATCATGAACACTTTCAAATTGGACCCTTGGGTGAAA GGAACCCGGCCTTTTCAGCGGAAGTTATCGTTCCGATCACTGTCATGAATAAAGCCATGCCTGTGTTTGAAAAAC CTTTCTACAGTGCAGAGATTGCAGAGAGCATCCAGGTGCACAGCCCTGTGGTCCACGTGCAGGCTAACAGCCCGG AAGGCCTGAAAGTGTTCTACAGCATCACAGACGGAGACCCTTTCAGCCAGTTCACTATTAACTTCAATACTGGAG TTATCAATGTCATAGCTCCTCTGGACTTTGAGGCCCACCCGGCATATAAGCTGAGCATACGCGCAACTGACTCCT TGACGGGCGCTCATGCTGAAGTATTTGTGGACATCATAGTAGACGACATCAATGATAACCCTCCTGTGTTTGCTC AGCAGTCTTATGCGGTGACCCTGTCTGAGGCATCTGTAATTGGAACGTCTGTTGTTCAAGTTAGAGCCACCGATT CTGATTCAGAACCAAATAGAGGAATCTCATACCAGATGTTTGGGAATCACAGCAAGAGTCATGATCATTTTCATG

WO 2004/030615 PCT/US2003/028547

1654/6881 FIGURE 1530C

TAGACAGCAGCACTGGCCTCATCTCACTACTCAGAACCCTGGATTACGAGCAGTCCCGGCAGCACACGATTTTTG TGAGGGCAGTTGATGGTGGTATGCCCACGCTGAGCAGTGATGTGATTGTCACGGTGGACGTTACCGACCTCAATG ATAATCCACCACTCTTGAACAACAGATTTATGAAGCCAGAATTAGCGAGCACGCCCCTCATGGGCATTTCGTGA ATAAACATTTTGTCATTGACAGTGCAACAGGGATTATCACCCTCTCAAACCTGCACCGGCACGCCCTGAAGCCAT TTTACAGTCTTAACCTGTCAGTGTCTGATGGAGTTTTTAGAAGTTCCACCCAGGTTCATGTAACTGTAATTGGAG GCAATTTGCACAGTCCTGCTTTCCTTCAGAACGAATATGAAGTGGAACTAGCTGAAAACGCTCCCCTACATACCC TTGCCAAAGACAGATTTTACATAAATGAGAGAGGACAGATATTTACTTTGGAAAAACTTGATCGAGAAACCCCGG CGGAGAAAGTGATCTCAGTCCGTTTAATGGCTAAGGATGCTGGAGGAAAAGTTGCTTTCTGCACCGTGAATGTCA TCCTTACAGATGACAATGCACCACAATTTCGAGCAACCAAATACGAAGTGAATATCGGGTCCAGTGCTG CTAAAGGGACTTCAGTCGTTAAAGTTCTTGCAAGTGATGCCGATGAGGGCTCCAATGCCGACATCACCTATGCCA TTGAAGCAGACTCTGAAAGTGTAAAAGAGAATTTGGAAATTAACAAACTGTCCGGCGTAATCACTACAAAGGAGA GCCTCATTGGCTTGGAAAATGAATTCTTCACTTTCTTTGTTAGAGCTGTGGATAATGGGTCTCCATCAAAAGAAT CTGTTGTTCTTGTCTATGTTAAAATCCTTCCACCGGAAATGCAGCTTCCAAAATTTTCAGAACCTTTCTATACCT TGAAGTTGGAGAAGAGTCTTGATCATGAGACAACTAAGTGGTATCAGTTTTCCATACTGGCCAGGTGCACTCAAG ATGACCATGAGATGGTGGCTTCTGTAGATGTTAGTATCCAAGTGAAAGATGCAAATGACAACAGCCCGGTCTTTG AATCTAGTCCATATGAGGCATTCATTGTTGAAAACCTGCCAGGGGGAAGTAGAGTAATTCAGATCAGGGCATCTG ATGCTGACTCAGGAACCAACGCCAAGTTATGTATAGCCTGGATCACAAAGTGTGGAAGTCATTGAATCCT TTGCCATTAACATGGAAACAGGCTGGATTACAACTTTAAAGGAACTTGACCATGAAAAGAGAGACACTTACCAGA TTAAAGTGGTTGCATCAGATCATGGTGAAAAGATCCAGCTATCCTCCACAGCCATTGTGGATGTTACCGTCACCG GGGTGATTGCCATCTTAAGTACCACGGATGCTGATTCTGAAGAGATCAACAGACAAGTTACATATTTCATAACAG ACAGGGAAAAAAGGGACAATTACCTTCTTACTATCACGGCAACTGATGGCACCTTCTCATCAAAAGCGATAGTTG AAGTGAAAGTTCTGGATGCAAATGACAACAGTCCAGTTTGTGAAAAGACTTTATATTCAGACACTATTCCTGAAG ACGTCCTTCCTGGAAAATTGATCATGCAGATCTCTGCTACAGACGCAGACATCCGCTCTAACGCTGAAATTACTT ACACGTTATTGGGTTCAGGTGCAGAAAAATTCAAACTAAATCCAGACACAGGTGAACTGAAAACGTCAACCCCC TTGATCGTGAGGAGCAAGCTGTTTATCATCTTCTCGTCAGGGCCACAGATGGAGGAGGAAGATTCTGCCAAGCCA GTATTGTGCTCACGCTAGAAGATGTGAACGATAACGCCCCCGAATTCTCTGCCGATCCTTATGCCATCACCGTGT TTGAAAACACAGAGCCGGGAACGCTGCTGACAAGAGTGCAGGCCACAGATGCCGACGCATTAAATCGGAAGA TTTTATACTCACTGATTGACTCTGCTGATGGGCAGTTCTCCATTAACGAATTATCTGGAATTATTCAGTTAGAAA AACCTTTGGACAGAACTCCAGGCAGTATACACCCTCTCTTTGAAAGCTGTGGATCAAGGCTTGCCAAGGAGGC TGACTGCCACTGGCACTGTGATTGTATCAGTTCTTGACATAAATGACAACCCCCTGTGTTTTGAGTACCGTGAAT ATGGTGCCACCGTGTCTGAGGACATTCTTGTTGGAACTGAAGTTCTTCAAGTGTATGCAGCAAGTCGGGATATTG AAGCAAATGCAGAAATCACCTACTCAATAATAAGTGGAAATGAACATGGGAAATTCAGCATAGATTCTAAAACAG GGGCCGTATTTATCATTGAGAATCTGGATTATGAGAGCTCTCATGAGTATTACCTAACAGTAGAGGCCACTGATG GAGGCACGCCTTCACTGAGCGACGTTGCCACTGTGAACGTTAATGTAACAGATATCAACGATAATACCCCTGTGT TCAGCCAAGACACCTACACGACAGTCATCAGTGAAGATGCCGTTCTTGAGCAGTCTGTCATCACGGTTATGGCCG ATGATGCCGATGGACCTTCCAACAGCCACATCCACTACTCAATTATAGATGGCAACCAAGGAAGCTCGTTCACAA TTGACCCCGTCAGGGGAGAAGTCAAAGTGACCAAACTTCTCGACCGAGAAACGATTTCAGGTTACACGCTCACGG TTCAAGCTTCTGATAATGGCAGTCCACCCAGAGTCAACACGACGACGTGAACATCGATGTCCGATGTCAATG ACAACGCGCCCGTCTTCTCCAGGGGAAACTACAGTGTCATTATCCAGGAAAATAAGCCAGTGGGCTTCAGCGTGC TGCAGCTGGTAGTAACAGATGAGGATTCTTCCCATAACGGTCCACCCTTCTTTACTATTGTAACTGGAAATG

PCT/US2003/028547

FIGURE 1530D

TAATTGAGGAGAGCATCTATCCGCCTGCGATTTTGCCCCTGGAGATTTTCATCACCTCTTCTGGAGAAGAATACT CAGGTGGCGTCATTGGGAAGATCCATGCCACAGACCAGGACGTGTATGATACTCTAACCTACAGTCTCGACCCTC AGATGGACAACCTGTTCTCTGTTTCCAGCACAGGGGGCCAAGCTGATAGCACACAAAAAGCTAGACATAGGGCAAT ACCTTCTCAATGTCAGCGTAACAGATGGGAAGTTCACGACGGTGGCCGACATCACAGTGCATATCAGACAAGTCA CACAGGAGATGTTGAACCACCACCACCGCTTTGCCAACCTCACTCCGGAAGAATTCGTTGGTGACTACT GGCGCAACTTCCAGCGAGCTTTACGGAACATCCTGGGTGTGAGGAGGAACGACATACAGATTGTTAGTTTGCAGT CCTCTGAACCTCACCCACATCTGGACGTCTTACTTTTTGTAGAGAAACCAGGTAGTGCTCAGATCTCAACAAAAC AACTTCTGCACAAGATTAACTCTTCCGTGACTGACATTGAGGAAATCATTGGAGTTAGGATACTGAATGTATTCC AGAAACTCTGCGCGGGACTGGACTGCCCCTGGAAGTTCTGCGATGAAAAGGTGTCTGTGGATGAAAGTGTGATGT CAACACACAGCAGCCAGACTGAGTTTTGTGACTCCCCGCCACCACAGGGCAGCGGTGTGTCTCTGCAAAGAGG GAAGGTGCCCACCTGTCCACCATGGCTGTGAAGATGATCCGTGCCCTGAGGGATCCGAATGTGTCTGATCCCT GGGAGGAGAAACACCTGTGTCTGTCCCAGCGGCAGGTTTGGTCAGTGCCCAGGGAGTTCATCTATGACACTGA CTGGAAACAGCTACGTGAAATACCGTCTGACGGAAAATGAAAACAAATTAGAGATGAAACTGACCATGAGGCTCA GAACATATTCCACGCATGCGGTTGTCATGTATGCTCGAGGAACTGACTATAGCATCTTGGAGATTCATCATGGAA GGCTGCAGTACAAGTTTGACTGTGGAAGTGGCCCTGGAATTGTCTCTGTTCAGAGCATTCAGGTCAATGATGGGC AGTGGCACGCAGTGGCCCTGGAAGTGAATGGAAACTATGCTCGCTTGGTTCTAGACCAAGTTCATACTGCATCGG GCACAGCCCCAGGGACTCTGAAAACCCTGAACCTGGATAACTATGTGTTTTTTGGTGGCCACATCCGTCAGCAGG AGGAGCTCCCTTTAAACAGCAAACCCAGAAGCTATGCACACATCGAAGAGTCGGTGGATGTATCTCCAGGCTGCT TCCTGACGGCCACGGAAGACTGCGCCAGCAACCCTTGCCAGAATGGAGGCGTTTGCAATCCGTCACCTGCTGGAG GTTATTACTGCAAATGCAGTGCCTTGTACATAGGGACCCACTGTGAGATAAGCGTCAATCCGTGTTCCTCCAAGC AGAGGTGTCAGCTTAGTCCATACTGCAAAGATGAACCCTGTAAGAATGGCGGAACATGCTTTGACAGTTTGGATG GCGCCGTTTGTCAGTGTGATTCGGGTTTTAGGGGAGAAAGGTGTCAGAGTGATATCGACGAGTGCTCTGGAAACC CTTGCCTGCACGGGGCCCTCTGTGAGAACACGCACGGCTCCTATCACTGCAACTGCAGCCACGAGTACAGGGGAC AGAAGCATCAGGCTGAACCTAAAGACAAGCACCTGGGACCCGCTACGGCTTTCTTGCAAAGACCGTATTTTGATT CCAAGCTAAATAAGAACATTTACTCAGACATACCACCCCAGGTGCCTGTCCGGCCTATTTCCTACACCCCGAGTA TTCCAAGTGACTCAAGAAACAATCTGGACCGAAATTCCTTCGAAGGATCTGCTATCCCAGAGCATCCCGAATTCA GCACTTTTAACCCCGAGTCTGTGCACGGGCACCGAAAAGCAGTGGCGGTCTGCAGCGTGGCGCCAAACCTGCCTC AAGTGGTGGATCTTGATCCCTGTCTTTCCAAGAAGCCTCTAGAGGAAAAGCCTTCCCAGCCATACAGTGCCCGGG AAAGCCTGTCTGAAGTGCAGTCTCTGAGCTCCTTCCAGTCCGAATCGTGCGATGACAATGGGTATCACTGGGATA CACCCCTGTACTCAGCAGATCCAAACGCCATCGATACGGACTATTACCCTGGAGGCTACGACATCGAAAGTGATT TTCCTCCACCCCAGAAGACTTCCCCGCAGCTGATGAGCTACCACCGTTACCGCCCGAATTCAGCAATCAGTTTG AATCCATCCACCCTCCTAGAGACATGCCTGCCGCGGTAGCTTGGGTTCTTCATCAAGAAACCGGCAGAGGTTCA GTACTTGTAGAGAACCCCATGCCCCTTACCCGCCAGGGTATCAAAGACACTTCGAGGCGCCCGCTGTCGAGAGCA TGCCCATGTCTGTACGCCTCCACCGCCTCCTGCTCTGACGTGTCAGCCTGCTGCGAAGTGGAGTCCGAGGTCA TGATGAGTGACTATGAGAGCGGGGACGACGGCCACTTCGAAGAGGTGACGATCCCGCCCCTGGATTCCCAGCAGC ACACGGAAGTCTGACTCTCAACTCCCCCAAAGTGCCTGACTTTAGTGAACCTAGAGGTGATGTGAGTAATCCGC GCTGTTCTTTGCAGCAGTGCTTCCAAGCTTTTTTTGGTGAGCCGAATGGGCATGGCTGCGCTGGATCCTGCGCCT CTGGACGTGCTAGCCATTTCCAGTGTCCCAACTACTGTCATCGTGAGGTTTTCATCGGCTGTGCCATTTCCCAAC GTCTTTTGGGATTTACATCTGTCTGTGTTAAAATAATCAAACGAAAAATCAGTCCTGTGTTGTCAGCATGATTCA TCATAGTTTTAACTAGATTTCCAAGATATTTTGTGCATTTGTTCAACTGAATTTTGGTGGTGTCAGTGCCATTA

PCT/US2003/028547

1656/6881 FIGURE 1530E

PCT/US2003/028547

1657/6881 FIGURE 1531

PCT/US2003/028547

FIGURE 1532

CTCCCCTGCCTCGTGGCTTTTTGCCCCTGAAGCCACAGCTTTTTGCCCTCGCCGCCGCGGCTTTTTGCGACCT TTTCCCCCTGCTGCCGCAGCTTTTTGCCCCCACCACCGCGAATTTTTCTGCCGCGGCTTTTTGTCACCGCCGCC GTGGCTTTTTATGGCTTTTTGCCCCCGGTTTTTCCCGCCGCGCTTCCTGCCCCGCAGCCCCGGCTTTTTGCGGC TTTTTGCCGCCGTGGCTTTTGGCCCCCGCCACTGTGGCTTTTTACGCCTTTTTCGCCCCCGCCGCCGCGCGGTTTTT CCTCCGCGGCTTTTTATCACCCCAGCCGCTTTTTGCCCCCGCCGCCACGGGTTTTTGCTCCTGCCGCCGAGGGTT TTTGCGCCTTCATGTCCCCACCGTCGTGGCTTTTTGCCGCCCCTGCTTTTTGCCCCCCTCTGACGCGGCTTTTTGC GGCTTTTTACCACCTCCACCGTGGCTTTTTGCGGCTTTTTGGCACCGGACGCCATGGCTTTTTCAGGCTTTTTGCC CCGCCGCCACGGCTTTTTGCTGCCGCCACACCGTTTAGCCCCCACCGCGCCTTTTTGCACCCGCAGCCGCATCTT TTTGCCGCCGCGACTTCTTACCCCGCCACCGCGGTTTTTACCGCTGAGGCTTTTTCACCCCGCCGTCGCGGGTTT TTGCCCCCACGCCGTGGCTTTTTGCCCCCACCGCGCGGGTCTGAGGGCGGGATTGGCAGACTCGGCTGCTAGA TCTACCGGCGTCCTGGCTAAGGCAGCGCCGACGGTCACTCCTGGTCCAGCTCTCCTGGTTCGGGGGCTGCATAGA GGCGCAGGGGCCGCAGCCAGCCGGGTGCTGCAGCAGTGCGGGCAGCTCCAGAAGCTCATTGGCATCTCCTTTGGC AGCCTGCGTTGGCTGCGCACCAAGTGCGCTGAGTCCAAAGACCTCACCCAGCAGGAGATACGGACCGTGCAGGAT GAGTCCGAGGGGCTCCTAGGCACAGAGGGGCCCCTGGAGGAAGAAGAGGATGGAGAGGAGCTCATTGGAGATGGC ATGGAAAGGTAA

PCT/US2003/028547

1659/6881 FIGURE 1533

ATGGATGAGGACAGCTGTGTCAATGCCCAGGCCACGGGAACTCCACTTGCTAAACAGAATGTTATCCCGGAAATC TGTGCCCTTCTCTGTATGCCTCTTGTCCTTTTTCACTGCCCTATTCAGTAACTTCACAAATATAATGAGCAC $\tt CTGCCAAGAACCATGTCAGGCCTGGGGCAACAAACAGCCCCTGCTGTCAAGGAACCCGCAGGCTTGTGGGGCCGT$ CATGCTATCAAAAGGCAGCTCCAAGAGAGACAGTGGGATGAGTGTCAAACAGATGTTTCAGCCAAGTATGGCAGG CCCTGTGCGCTGCCCAGAATGTCTTCCTGAACACAGCTATGACTGGGCCTACTGGCCTTGGCTGTTTGATCTA AGCAGAGGCCTAACTGAGACTGAACTAAGCATTTTTCCTCTCCCAGGAATTGGAATTTTGGAACCACGAATGAGC ACCTCTGCAGCCAAGGCCCATGAGCAATGGCACCCTGGAGGAGAAGCCCAAGAAGCAGACCTGGTTCCAGCCCCT TTCACCGCCCGGGGTGCCACGGCCCTTTCAACGTGTATGGCAGGAGGTGTGCAGGGCATTCAGGAGGCCTCCTGG CTGGCACTCGACCCAATTAGTCATTCAACGCCAGGTCTGGGGCTGCTGTTGTTGTCTCAAAGCCCATCTGTGAA CACATGGTAGAGTCTCCAACCTGTTCCCAGATGTCCAACCTGGTCTGCGGCACTGATGGGCTCACATATACGAAT GAATGCCAGCTCTGCTTGGCCCGGATCCTGTTTGAATTCTTCGGCCAAGTGAGGTACAGACCAGGGCCCTATGAA CACCTGCAAGCAAGACAGCCACGCAGTTGTGGGTCACCTTGGAAGAATATTGGAGAATGCAAGAGAACAGGGC AGCAGTGAACCAGTTGTCCAAGACCTGGCCCAGGTTGTTGAAGAGGTCATAGGGGTTCCACAGTCTTTTCAGAAA CTCATATTTAAGGTTTTACTATGCCCAAACAGAAATCCTGATGGGAAAGGAAAATGCCTTGCTATATCTGTAATT TATCAACATGAAAACATTACGGTTTTAATCATAAAATTCAAGAGATTTAACTTGTTTGCCATCAGTTCTCCACCA AGGAAAGATAAGTTGATATTGCCAGCCTTTCATGAGCTTCCTCCTAACAGTAGGCTTATCGCCTTTGCACATTCC GGGCAAACAGAAGCCAGAAAATCCTGCCAAAAACCTTTCATCTGGTCAGGGAGTGGAGGCCGTGCTGTGCGCGCC $\tt CTCTTGCGGGAGCCACCAGGCAAGCATCTTAAGAGGGGCAAGCGGAAAAGGGTGTCTGTGGATCTGCCCTGTTCT$ GGTGGTTTCAGGCAGCCCTGCTTTCTTCCCGCCTGGCAGTCAGCAGGGGGGGAGAGTCACTCAGAGCAAGATGGA GAGCCTTAG

PCT/US2003/028547

FIGURE 1534

CAGAAGAAGCCCTTTGAGGAGCACTGGAGGAAGCACCCCTGTCCTATGTGGACGTTGGCACTGGGAAGTGCACA ACTATTGGCACACGCAGCAGCTTGAATAAATCTGAAAGTCACTATGCTGTGTAAGAGAAGCCAAATTTAAAAAGT GCATGCTGTGTACAGAGGGTGTCAAGAATGCCTCCTACGTGACGGAAAGCAGATCCGTGGTTGCCTGCAGACTGG CAGGAGCAGATTCCAAAGGCACAGGAAGAAGCTTGTGGGTAGAATGTGTTCATTACCTTCTGTGCATTATACCAT AAAAAAGCTGGTCACAAAAATGCAAACCAAAAACAAAGGTGAAACTAGGATAAGATTTCTCACCTGTGTGATTGG TAAACGTGCAGATGTGCCGTCATGCTTTGTTTATGAAGCTGTGGGATACAAGGACTCTCATACGTCACTGTGGAA TGCAGAATATTGCAGCCTCATGGAAGAGGATTTGGCAGCGTCTAACAAAACTACATGGCATTTGCCCTTTGACTC AGCAATTCTAGAATCTGCCTCAAAAAAACTCCAGCAAAGAAATGAAAGGACTTTAGGCACAGAGTTCTTTTCACA GCCTGCATGTGTTTGCAACAAAGTTCTTCACTGTGGCGTTTGTAAATGTGGGGAAAAGAGAGATCAGGCTGGTAC TGTGTCTGTGTAGAAAAGGAGGACGTAAGAAACTCCATTTTGATCTGTACCCCGAGCGATTGTTTTGCCCTGAGA TGCTGTTAATCTGTAACTTTAGCCCCAGCCTTGAGCTCACAGAAACCTGTGTTGTATGGAATCAAGGTTTCAGGG ATCTAGGGCTGTGCAGGACGTGCCTTGTTAAGAAAATGCTTACAGGCAGTACGCTTGGTAAAAGTTATCGCCATT CTCCATTCTCGATAAACCAGGGGCACAATGCACTGCGGAAAGCCGCAGGGACCTCTGCCCAGGAAAGCCGGGTAC CATCCAAGGTTTCTCCCCACTGAGATATGGCCTTGTGGGATGGGAAAGACCTGACCATCCACCAGCCCGACACCC GTGAAGGATCTGTGCTGAGTAGGATTAGTAAAAGAGGAAGGCCTCTGTCTCCCTGCCTTCCCCTGGGAACGGAATG TCTCAGTATAAAACTGATCGTACATTTGTTCAATTCTGAGATAGGAGAAAAACCACCCTGTGGTGGGAGGCGAGA CATGTTGGCCGCAATGCTGCTGTTACTCTTTACTCCACTGAAATGTTTGGGTGGAGAAAGCATAAATCTGGCCT CTGACCTTCTCCCCACTGTCACCCTGTTCTCCTGCCACATTCCTCTTGCTGAGATAGTGAAAATAGTAATCAATA AATACTGAGGGAACTCAGAGACCGGTGCCAGTGCGGGTCCTCTGTATGCTGAGCGCCCAGTCCCCTGGGCCCACTT TTCTTTCTCT

PCT/US2003/028547

FIGURE 1535

AATAAAGAAATAGTGCTTTAAGTCAATGAATTCCTCCTTGGGACCCACTATCGAGAAACTATCAGTGGTAACGTT TTAAAAAATGACAAATTCAATCTGCTCTTGACTTGTGTGTCCTAAGATTTCCACTAAGTGTCTTCAAACCTCCCC CTCCCGGCTTCCTGGATAATAGAAGTTCCCGAAGGCCGCCGATTCCAGAAGATACTGTCTGGCGTGAAATTAGT CTCAGTAGAAACATAAGTCCCGCGCGTCTTGTGCTGCGCGTGCGCAAGCTTTTGGGCCCTCCCGAGAAAGGGAAG TGCATTCTCGCTTCCGTAGCGGTCTCCGCCGGTTGGGGGGAAGTAATTCCGGTTGTTGCACCATGGCGTCCATGG GGACCCTCGCCTTCGATGAATATGGGCGCCCTTTCCTCATCATCAAGGATCAGGACCGCAAGTCCCGTCTTATGG GACTTGAGGCCCTCAAGTCTCATATAATGGCAGCAAAGGCTGTAGCAAATACAATGAGAACATCACTTGGACCAA ATGGGCTTGATAAGATGATGGTGGATAAGGATGGAGATGTGACTGAACTAATGATGGGGCCCACCATCTTAAGCA TGATGGATGTTGATCAGATTGCCAAGCTGATGGTGGAACTGTCCAAGTCTCAGGATGATGAAATTGGAGATG GAACCACAGGAGTGGTTGTCCTGGCTGGTGCCTTGTTAGAAGAAGCGGAGCAATTGCTAGACCGAGGCATTCACC CAATCAGAATAGCCGATGGCTATGAGCAGGCTGCTCGTGTTGCTATTGAACACCTGGACAAGATCAGCGATAGCG TCCTTGTTGACATAAAGGACACCGAACCCCTGATTCAGACAGCAAAAACCACGCTGGGCTCCAAAGTGGTCAACA GTTGTCACCGACAGATGGCTGAGATTGCTGTGAATGCCGTCCTCACTGTAGCAGATATGGAGCGGAGAGACGTTG ACTTTGAGCTTATCAAAGTAGAAGGCAAAGTGGGCGGCAGGCTGGAGGACACTAAACTGATTAAGGGCGTGATTG TGGACAAGGATTTCAGTCACCCACAGATGCCAAAAAAAAGTGGAAGATGCGAAGATTGCAATTCTCACATGTCCAT TTGAACCACCCAAACCAAAAACAAAGCATAAGCTGGATGTGACCTCTGTCGAAGATTATAAAGCCCTTCAGAAAT ACGAAAAGGAGAATTTGAAGAGATGATTCAACAAATTAAAGAGACTGGTGCTAACCTAGCAATTTGTCAGTGGG GCTTTGATGATGAAGCAAATCACTTACTTCTCAGAACAACTTGCCTGCGTTCGCTGGGTAGGAGGACCTGAAA TTGAGCTGATTGCCATCGCAACAGGAGGGCGGATCGTCCCCAGGTTCTCAGAGCTCACAGCCGAGAAGCTGGGCT TTGCTGGTCTTGTACAGGAGATCTCATTTGGGACAACTAAGGATAAAATGCTGGTCATCGAGCAGTGTAAGAACT CCAGAGCTGTAACCATTTTTATTAGAGGAGGAAATAAGATGATCATTGAGGAGGCGAAACGATCCCTTCACGATG CTTTGTGTGTCATCCGGAACCTCATCCGCGATAATCGTGTGGTGTATGGAGGAGGGGCTGCTGAGATATCCTGTG CCCTGGCAGTTAGCCAAGAGGCGGATAAGTGCCCCACCTTAGAACAGTATGCCATGAGAGCGTTTGCCGACGCAC TGGAGGTCATCCCCATGGCCCTCTCTGAAAACAGTGGCATGAATCCCATCCAGACTATGACCGAAGTCCGAGCCA GACAGGTGAAGGAGATGAACCCTGCTCTTGGCATCGACTGTTTGCACAAGGGGACAAATGATATGAAGCAACAGC ATGTCATAGAAACCTTGATTGGCAAAAAGCAACAGATATCTCTTGCAACACAAATGGTTAGAATGATTTTGAAGA TTGATGACATTCGTAAGCCTGGAGAATCTGAAGAATGAAGACATTGAGAAAACTATGTAGCAAGATCCACTTCTG CTATAATAAAAATAGCTGTTTGGTAACCATAGTTTCACTTGTTCAAAGCTGTGTAATCGTGGGGGTACCATCTCA ACTGCTTTTGTATTCATTGTATTAAAAGAATCTGTTTAAACAACCTTTATCTTCTCTCTGGGTTTAAGAAACGTT TATTGTAACAGTAATTAAATGCTGCCTTAATTG

PCT/US2003/028547

1662/6881 FIGURE 1536

MASMGTLAFDEYGRPFLIIKDQDRKSRLMGLEALKSHIMAAKAVANTMRTSLGPNGLDKMMVDKDGDVTVTNDGA
TILSMMDVDHQIAKLMVELSKSQDDEIGDGTTGVVVLAGALLEEAEQLLDRGIHPIRIADGYEQAARVAIEHLDK
ISDSVLVDIKDTEPLIQTAKTTLGSKVVNSCHRQMAEIAVNAVLTVADMERRDVDFELIKVEGKVGGRLEDTKLI
KGVIVDKDFSHPQMPKKVEDAKIAILTCPFEPPKPKTKHKLDVTSVEDYKALQKYEKEKFEEMIQQIKETGANLA
ICQWGFDDEANHLLLQNNLPAVRWVGGPEIELIAIATGGRIVPRFSELTAEKLGFAGLVQEISFGTTKDKMLVIE
QCKNSRAVTIFIRGGNKMIIEEAKRSLHDALCVIRNLIRDNRVVYGGGAAEISCALAVSQEADKCPTLEQYAMRA
FADALEVIPMALSENSGMNPIQTMTEVRARQVKEMNPALGIDCLHKGTNDMKQQHVIETLIGKKQQISLATQMVR
MILKIDDIRKPGESEE

PCT/US2003/028547

FIGURE 1537

PCT/US2003/028547

1664/6881 FIGURE 1538

 ${\tt MAEKFDHLEEHLEKFVENIRQLGIIVSDFQPSSQAGLNQKLNFIVTGLQDIDKCRQQLHDITVPLEVFEYIDQGR} \\ {\tt NPQLYTKECLERALAKNEQVKGKIDTMKKFKSLLIQELSKVFPEDMAKYRSIRGEDHPPS}$

PCT/US2003/028547

1665/6881 FIGURE 1539

GGGATTTGTTATTGCGAATGATGTGGACAACAAGCGCTGCTACCTGCTCCATCAAGCCAAGAGGCTGAGCAG GATCCTCTTCTATGATCGAATTTTATGTGATGTCCCTTGCAGTGGAGACGCCACTATGAGAAAAAACATTGATGT TTGGAAAAAGTGGACCACCTTAAATAGCTTGCAGCTACATGGCTTACAGCTGCGGATTGCAACACGCGGGGCTGA ACAGCTGGCTGAAGGTGGAAGGATGGTGTATTCCACGTGTTCACTAAACCCTATTGAGGATGAAGCAGTCATAGC ATCTTTACTGGAAAAAAGTGAAGGTGCTTTGGAGCTTGCTGATGTGTCTAATGAACTGCCAGGGCTGAAGTGGAT GCCTGGAATCACACAGTGGAAGGTAATGACGAAAGATGGGCAGTGGTTTACAGACTGGGACGCTGTTCCTCACAG CAGACACACCCAGATCCGACCTACCATGTTCCCTCCGAAGGACCCAGAAAAGCTGCAGGCCATGCACCTGGAGCG ATGCCTTAGGATATTACCCCATCATCAGAATACTGGAGGGTTTTTTGTGGCAGTATTGGTGAAAAAATCTTCAAT GCCGTGGAATAAACGTCAGCCAAAGCTTCAGGGTAAATCTGCAGAGACCAGAGAAAGCACACAGCTGAGCCCTGC AGATCTCACAGAAGGGAAACCCACAGATCCCTCTAAGCTGGAAAGTCCGTCATTCACAGGAACTGGTGACACAGA TGAGAAATTTTATGCTTTGGATCCTTCATTCCCAAGGATGAATTTGTTAACTCGGACTACAGAAGGGAAGAAAAG GCAGCTCTACATGGTTTCTAAGGAGTTGCGGAATGTGCTGCTGAATAACAGTGAGAAGATGAAGGTTATTAACAC GGGGATCAAAGTCTGGTGTAGAAATAACAGCGGTGAAGAGTTTGACTGTGCTTTCCGGCTGGCACAGGAGGGAAT ATATACATTGTATCCATTTATTAACTCAAGAATTATTACTGTATCAATGGAAGATGTTAAGATACTGTTGACCCA GGAAAATCCCTTTTTTAGAAAACTCAGCAGTGAGACCTACAGTCAAGCAAAGGACCTGGCAAAGGGAAGCATCGT GCTGAAGTATGAACCAGATTCTGCGAATCCAGACGCTCTGCAGTGTCCCATCGTCTTATGCGGATGGCGGGAAA GGCCTCCATTCGAACTTTTGTGCCCAAGAATGAACGGCTTCATTATCTCAGGATGATGGGGCTGGAGGTATTGGG TGAGGGACAGAGAGCAGGAGAGCCCAACAGCCCAGATGCAGAAGAGGCCAACAGTCCAGACGTGACAGCAGGCTG TGACCCGGCGGGGGTCCATCCACCCCGGTGAGCAGGCCCAAGGCAGCGGGGGCCCACACCCCTCACACGCAAAAC TGGCTTCTTCTGGTCACTGGTGTCTGAAACCAAATCCAGAGCAGCCTGTGGCCTGTAAAGCATATATTTCTAATG CTTTTAGCGTGTTAGAAATCACTTGTTTTATTTTGTTTCTTTGGCCAAGCTGGGTCTAGTGTTTCTTTTGCTGGG AATAGACTTTCAAAAGTTGTACTTCTATCAAGAAACAAAACTGCCCTTGCAGAAATTTCAGGTCTTTTGTTAAGC GTTATAAGCTTTAATAATTACATTGAGCTGCACCTCAGTGGTGTGTCATTAACATGCAGTGGGGTTAATATCTGA GGCCTCAGATGACTTTGTGCCTTTTGGAATAAAGGGTAAAATAAACTCTCCCAGAGTAAGAGCTGTATCGTGAAT TGTCATACTAATTATTGAGGGGGACTTATGTGCTTTTATTGAATGGAGTGCTTTACAATTTTTATTTTAAATGG GGTTGGGATCCTTGGAATATTTCAATAAAATTGATAAAATAT

PCT/US2003/028547

FIGURE 1540

TCCTGCTTCGCCCTCCCAGCGCCTAGAAGCCTGCAGCTCCGGAGCAGTGGCCGCCCACGCCGCCCCAGCGCGCC CCTCGGCTCCCCAGTTCTTGATGGCCACCAACTCCCTGAGCACGTGCTGCGAGTCCGGAGGCCGCACGCTGGCGG ACTCCGGGCCCGCCTCGGCCCAGGCGCCGGTCTACTGCCCGGTCTACGAGAGCCGGCTGCTGGCCACCGCGC GCCACGAGCTCAACTCGGCCGCGCGCGCGCGTCTATGGGGGGTCCCTATGGCGGATCGCAGGGCTATGGCAACT ACGTGACCTACGGCTCGGAGGCGTCCGCCTTCTACTCGCTGAACAGCTTTGATTCCAAGGATGGTTCGGGATCTG CGCATGGGGGCCTGGCACCAGCCGCTGCCGCCTACTACCCTTACGAGCCAGCTCTGGGCCAGTACCCCTATGACA TGCAGGAGCACCGCAAGAACCCCTACCCCACCAAGGGCGAGAAGATCATGCTGGCCATCATCACCAAGATGACCC TCACACAGGTCTCCACCTGGTTCGCCAACGCGCGCCGCGCCCTCAAGAAGGAGAACAAGATGACGTGGCCGCCGC AGGAGCCCCTCAAGAGCTCCAAGAACGCAGAGCCCGTGGGCAAAGAGGAGAAGGAGCTGGAGCTTAGTGACTTGG ACGACTTCGACCCGCTGGAAGCAGAGCCGCCGGCGTGCGAGCTGAAGCCGCCCTTCCACTCCCTGGACGGCGGTC TGGAGCGCGTCCCCGCCGCCCGACGGCCCGGTCAAGGAGGCCTCAGGCGCGCTCCGGATGTCTCTGGCCGCGG GTGGCGGAGCTGCTCTGGACGAGGACCTGGAGAGGGCCCGGAGCTGTCTCCGCAGCGCGGCCGGGCCGGAGC CACTGCCGGGCGCAGAGGGCGGCCCTCAGGTCTGCGAGGCCAAGCTGGGGTTTGTGCCGGCGGGGGCGTCGGCAG GCCTGGAGGCTAAGCCGCGCATCTGGTCCCTGGCCCACACAGCCACCGCCGCCGCCGCCGCCGCCACCTCCCTGA GCCAGACTGAGTTTCCGTCGTGCATGCTCAAGCGCCAAGGTCCCGCGGCCCCTGCGGCTGTGTCCTCCGCGCCCC CCACGTCCCCGTCTGTGGCCCCTTCCCCACTCTGGCGCCCCTGGACAGGCACCAGGACTCCCCGGTAACCAGTCTCA GAAACTGGGTGGACGGGGTCTTCCACGACCCCATCCTCAGGCACAGCACTTTGAACCAGGCCTGGGCCACCGCCA CCCGCGCCTTTCCGCCTGCCGTGCCCCAGGACGCCCCAGCTGCAGGCGCCCAGGGAGCTGCTCGCCCAA AGGCCGGCGCAAACCCTTCTGCGCCTGAGGCGGGCGGGTCCCGAGCCCAGGAGGGAACCCGCGCTCAGGCGGAC GGCGCCGACTCTTTTCACTGAGTTTCCAGAGGAAGACTAGCGCGGCCACCGCGAAGCCGCCAACCCACCGGAGAG GGGGCTTCTGAACTTGGACTCCTGGGAACATGGACAAGCCCGGCGCTGCCACGCCGGGGCCTCCACCGCCTGGGC CTGAGCCTGACCGGGCCATTCCCAAATTTGGGACGCGGAAGGAGAGGCTCTCGGAGCAGAAGAGGCCAGATACCC TGAAGCATAAAGTTTACGTCAAAAGTTTACATGGAGAAGGCGGTTCCGTTCTGAAGCGTGGTCTGCTGTCCCCTG GGCGTGAGGCCTCCTGGGCCTGTCGGGCCTCCGATTTCATCCTCAGCACGTAATGCTCACCAACAGCACTTGCAC GCTTCAGAGGCTAATATAACAAAACCAATAAAACCGAG

PCT/US2003/028547

FIGURE 1541

CTGGCCAAGGCGTGGCCAACAGTGTTGCAAACAGGAACCCGAGGTTTTCACTTCACTGTTGATGGGAACAAGAGG GCATCTGCTAAAGTTTCAGATTCCATTTCTGCTCAGTATCCAGTAGTGGATCATGAATTTGATGCAGTGGTGGTA GGCGCTGGAGGGCAGGCTTGCGAGCTGCATTTGGCCTTTCTGAGGCAGGGTTTAATACAGCATGTGTTACCAAG CTGTTTCCTACCAGGTCACACTGTTGCAGCACAGGGAGGAATCAATGCTGCTCTGGGGAACATGGAGGAGGAC ACGGAGCAGGCCCCCCCCCCCCGTGGTCGAGCTAGAAAATTATGGCATGCCGTTTAGCAGAACTGAAGATGGGAAG GCTGATCGGACTGGCCACTCGCTATTGCACACCTTATATGGAAGGTCTCTGCGATATGATACCAGCTATTTTGTG GAGTATTTTGCCTTGGATCTCCTGATGGAGAATGGGGAGTGCCGTGGTGTCATCGCACTGTGCATAGAGGACGGG TCCATCCATCGCATAAGAGCAAAGAACACTGTTGTTGCCACAGGAGGCTACGGGCGCACCTACTTCAGCTGCACG CTCATTAACAGTCAAGGCGAAAGGTTTATGGAGCGATACGCCCCTGTCGCGAAGGACCTGGCGTCTAGAGATGTG GTGGACGTCACGAAGGAGCCGATCCCTGTCCTCCCCACCGTGCATTATAACATGGGCGGCATTCCCACCAACTAC AAGGGGCAGGTCCTGAGGCACGTGAATGGCCAGGATCAGATTGTGCCCGGCCTGTACGCCTGTGGGGAGGCCGCC TGTGCCTCGGTACATGGTGCCAACCGCCTCGGGGCAAACTCGCTCTTGGACCTGGTTGTCTTTGGTCGGGCATGT GCCCTGAGCATCGAAGAGTCATGCAGGCCTGGAGATAAAGTCCCTCCAATTAAACCAAACGCTGGGGAAGAATCT GTCATGAATCTTGACAAATTGAGATTTGCTGATGGAAGCATAAGAACATCGGAACTGCGACTCAGCATGCAGAAG TCAATGCAAAATCATGCTGCCGTGTTCCGTGTGGGAAGCGTGTTGCAAGAAGGTTGTGGGAAAATCAGCAAGCTC TATGGAGACCTAAAGCACCTGAAGACGTTCGACCGGGGAATGGTCTGGAACACGGACCTGGTGGAGACCCTGGAG CTGCAGAACCTGATGCTGTGCGCTGCAGACCATCTACGGAGCAGAGGCACGGAAGGAGTCACGGGGCGCGCAT GCCAGGGAAGACTACAAGGTGCGGATTGATGAGTACGATTACTCCAAGCCCATCCAGGGGCAACAGAAGAAGCCC TTTGAGGAGCACTGGAGGAAGCACCCCTGTCCTATGTGGACGTTGGCACTGGGAAGGTCACTCTGGAATATAGA TTCATACGCTTCTGCACTCTGGGGAAGAAGGAGTACATTGAAGGGAGATTGGCACCTAGTGGCTGGGAGCTTGCC AGGAACCCAGTGGCCAGGGAGCGTGGCACTTACCTTTGTCCCTTGCTTCATTCTTGTGAGATGATAAAACTGGGC ACAGCTCTTAAATAAAATATAAATGA

PCT/US2003/028547

FIGURE 1542

MSGVRGLSRLLSARRLALAKAWPTVLQTGTRGFHFTVDGNKRASAKVSDSISAQYPVVDHEFDAVVVGAGGAGLR
AAFGLSEAGFNTACVTKLFPTRSHTVAAQGGINAALGNMEEDNWRWHFYDTVKGSDWLGDQDAIHYMTEQAPAAV
VELENYGMPFSRTEDGKIYQRAFGGQSLKFGKGGQAHRCCCVADRTGHSLLHTLYGRSLRYDTSYFVEYFALDLL
MENGECRGVIALCIEDGSIHRIRAKNTVVATGGYGRTYFSCTSAHTSTGDGTAMITRAGLPCQDLEFVQFHPTGI
YGAGCLITEGCRGEGGILINSQGERFMERYAPVAKDLASRDVVSRSMTLEIREGRGCGPEKDHVYLQLHHLPPEQ
LATRLPGISETAMIFAGVDVTKEPIPVLPTVHYNMGGIPTNYKGQVLRHVNGQDQIVPGLYACGEAACASVHGAN
RLGANSLLDLVVFGRACALSIEESCRPGDKVPPIKPNAGEESVMNLDKLRFADGSIRTSELRLSMQKSMQNHAAV
FRVGSVLQEGCGKISKLYGDLKHLKTFDRGMVWNTDLVETLELQNLMLCALQTIYGAEARKESRGAHAREDYKVR
IDEYDYSKPIQGQQKKPFEEHWRKHTLSYVDVGTGKVTLEYRPVIDKTLNEADCATVPPAIRSY

PCT/US2003/028547

1669/6881 FIGURE 1543

PCT/US2003/028547

1670/6881 FIGURE 1544

TTTACGATATCCAAATAAACTGGACACCATCACATGGACGTGGCAAGGACCTGGAGCGCTGGAAATCCTGTGGCT GTTCGAGGACTGCCAGCTGGCCGGAAGGACAGCTCCGTCTCCCCGCTGACACTTGCCTTTTAGAATTTGC CAGGCTCGTGCGGGGCCTCGGGCTAAAACCAGAAAAGCTTGAAAAAGATCTGGACAGATACTCAGAAAGAGCCAG GATGAAGGGAGGAGAAGATAGGTATTGCGGAGTTTGCCGCCTCCCTGGAAGTCCCCGTTTCTGACTTGCTGGA CGTCTGCCGGCCCGGACCCTGGACACCATCCAGCTGGCTTTCAAGATGTACGGAGCGCAAGAGGACGGCAG CCGAGCCATTGACCAAGAGGAGAAGGGGAAGATCACATTCGCTGACTTCCACAGGTTTGCAGAAATGTACCCTGC CTTCGCAGAGGAATACCTGTACCCGGATCAGACACATTTCGAAAGCTGTGCAGAGACCTCACCTGCGCCAATCCC AAACGGCTTCTGTGCCGATTTCAGCCCGGAAAACTCAGACGCTGGGCGGAAGCCTGTTCGCAAGAAGCTGGATTA GGACCCAGGGTTGCGGAGAGACGCGCCCCCCCCGCGTGGACATCACCGCCATGAGCCTCTTTGCGAGTGACCTC TGGGCTCCGCTCCTCACTCCTGCTGTACAGGCACTGTCTTCAGCCCGAGTTCCAGGGGCCTCGGGGGCTGTTTGT ATCTTGTTCCTTTGTGAAGTGTGTTGCAGAACCGACGCTTACTGTGCGAGAATCGGAGGGCGCGCACGCGGATCC CAGCACACGCCTGCCACACACGCGTGCGCTTGCGTGTCACTCTGGCACGAAACCTGTCTGCCTCTGTGGATCCACA GCCTGGCAGAGCCGAGCCGTCACCTGATTTTTCAGTGTTTCTACCTGTGTGCTGGAGCTCATGAGTATTTTATAA ACTCCATTTAGGTACTTCAGGAAACATGCAGCATTTTTTAAAAAATGAAAATTGTTTTTCTACTTCATTTTTCCT TAAATTTCCATCAGGCCTCTCTCCAGCAGGTAATCCCTCTCCTTCCGCTGGGTCCCCTGGGGAGGTGTGAACTCA AGGGCCTAGCCCAAAACACTTTTTCTGCTTTTCTTAATCCTTTTCCAGTCCCCTCTTTTTTTATAAACGTTGGC AGTTTGATGTTTCTGTTTCGGCATAACGTAATCCATTTCACTGTAGCCTAAACTCCAGTCCGAGGTTGGATATTG TTCAAATGAGCAGGCCCGAGCTGGAAGCGCAAGGCAGCCGCCGCGTGCCGCTCCCCTTGCCCTCAGGCCAG GTCCCTGCTGGAAGCGGCTGCATCTTCCTGTCAGCCCTGGTTTCCATGGTGACTGGCGTCACGCTGCCACCCGAG TATGGCTGACCTTCCTGCAGAGAGAGGAGCCGCAGTCTTTTGCTTGTGGAAGGAGACGCTGGGCTGTGCGGTGCG GAGGGTGATGAGGATGTCTGGTGACAGCCGTGCGGACACCACTCCTCTCTGCAGCACTGCCTCCCAGCGCCAGGG TCGCGGGCACATCCCACTGAGAGCGGGGTCCTGCCCCATCTTAGAGTCAAAGGCAGAGGGGCTTCCAGGCCCTG GATGGGGTATTTTGGTGTCACCTGAAGTCCCTCTGACATCACCTTGTTTCATCATTTTTTATGACAGAATTAGAA AAATTTTTTTGATTTCTGAAATGAATTGATTTTTATATTTGGGGCATCTCTATAGAAAGTGACCACCAAGGCCAG GGATGGAGTAAACCGAAGTCAATTTCAGGGCTCTTGGCGTGTTGGACACAGAAGAAATCCTAGTGCAGCCTTTGG TAGCTAACAGTCACTGATTTTATAATTGGAGAATGCGTAAAGATTCATTTTTCAAGGAGAAGAGCCTGCAAATGG CCAATGAAGGAGGTAAATAAACTAAGATATTCCGAGGGAAGGGACCCAGGCCACCTCCCTTCCGCAGGTCTGCAG ATGTTTGTTCCTCCTGATTCTCTTTTCTCTTCGTGGCGACTTAGAGTTGGCGGATATTCGGAACTGTGAATGTAC ATAGCGTTGAGTTAAACCCCTTGTGTGTGAGACAGGACGCGGGCCCCTGGTGGCCTGGGGGCCAGACCCGTG ACTTGGGATTTTCAATGGAATAAGTAAAACATAAAGTCTATACTTGGG

PCT/US2003/028547

WO 2004/030615

1671/6881 FIGURE 1545

GCTTGGTGGTGGGCGTGTTCGTGGTCTACGTGGTGCACACCTGCTGGGTCATGTACGGCATCGTCTACACCCGCC CGACGAGGTCCCACCTGGGTGCTGAGAACAACATCGACCTGGTCTTGAATGTGGAAGACTTTGATGTGGAGTCCA AATTTGAAAGGACAGTTAATGTTTCTGTACCAAAGAAAACGAGAAACAATGGGACGCTGTATGCCTACATCTTCC TCCATCACGCTGGGGTCCTGCCGTGGCACGACGGGAAGCAGGTGCACCTGGTCAGTCCTCTGACCACCTACATGG TCCCCAAGCCAGAAGAAATCAACCTGCTCACCGGGGAGTCTGATACACAGCAGATCGAGGCGGAGAAGAAGCCGA CGAGTGCCCTGGATGAGCCAGTGTCCCACTGGCGACCGCGGCTGGCGCTGAACGTGATGGCGGACAACTTTGTCT TTGACGGGTCCTCCCTGCCTGCCGATGTGCATCGGTACATGAAGATGATCCAGCTGGGGAAAACCGTGCATTACC TGCCCATCCTGTTCATCGACCAGCTCAGCAACCGCGTGAAGGACCTGATGGTCATAAACCGCTCCACCACCGAGC TGCCCCTCACCGTGTCCTACGACAAGGTCTCACTGGGGCGGCTGCGCTTCTGGATCCACATGCAGGACGCCGTGT ACTCCCTGCAGCAGTTCGGGTTTTCAGAGAAAGATGCTGATGAGGTGAAAGGAATTTTTGTAGATACCAACTTAT ACTTCCTGGCGCTGACCTTCTTTGTCGCAGCGTTCCATCTTCTCTTTGATTTCCTGGCCTTTAAAAATGACATCA GTTTCTGGAAGAAGAAGAAGACATGATCGGCATGTCCACCAAGGCAGTGCTCTGGCGCTGCTTCAGCACCGTGG TCATCTTTCTGTTCCTGCTGGACGAGCAGACGAGCCTGCTGGTGCTGGTCCCGGCGGGTGTTGGAGCCGCCATTG AGCTGTGGAAAGTGAAGAAGGCATTGAAGATGACTATTTTTTGGAGAGGCCTGATGCCCGAATTTCAGTTTGGCA CTTACAGCGAATCTGAGAGGAAAACCGAGGAGTACGATACTCAGGCCATGAAGTACTTGTCATACCTGCTGTACC CTCTCTGTGTCGGGGGTGCTGTCTATTCACTCCTGAATATCAAATATAAGAGCTGGTACTCCTGGTTAATCAACA GCTTCGTCAACGGGGTCTATGCCTTTGGTTTCCTCTTCATGCTGCCCCAGCTCTTTGTGAACTACAAGTTGAAGT CAGTGGCACATCTGCCCTGGAAGGCCTTCACCTACAAGGCTTTCAACACCTTCATTGATGACGTCTTTGCCTTCA TCATCACCATGCCCACGTCTCACCGGCTGGCCTGCTTCCGGGACGACGTGGTGTTTCTGGTCTACCTGTACCAGC GGTGGCTTTATCCTGTGGATAAACGCAGAGTGAACGAGTTTGGGGAGTCCTACGAGGAGAAGGCCACGCGGGCGC CCCACACGGAC<u>TGA</u>AGGCCGCCCGGGCTGCCGCCAGCCAAGTGCAACTTGAATTGTCAATGAGTATTTTTGGAAG CATTTGGAGGAATTCCTAGACATTGCGTTTTCTGTGTTGCCAAAATCCCTTCGGACATTTCTCAGACATCTCCCA AGTTCCCATCACGTCAGATTTGGAGCTGGTAGCGCTTACGATGCCCCCACGTGTGAACATCTGTCTTGGTCACAG AGCTGGGTGCTGCCGGTCACCTTGAGCTGTGGTGGCTCCCGGCACACGAGTGTCCGGGGTTCGGCCATGTCCTCA CGCGGCCAGGGGGGGCCCTCACAGGCAAGGGGGCTGTTGGATTTCCATTTCAGGTGGTTTTCTAAGTGCTCC TTATGTGAATTTCAAACACGTATGGAATTCATTCCGCATGGACTCTGGGATCAAAGGCTCTTTCCTCTTTTGTTT

PCT/US2003/028547

FIGURE 1546

MWSGRSSFTSLVVGVFVVYVVHTCWVMYGIVYTRPCSGDANCIQPYLARRPKLQLSVYTTTRSHLGAENNIDLVL NVEDFDVESKFERTVNVSVPKKTRNNGTLYAYIFLHHAGVLPWHDGKQVHLVSPLTTYMVPKPEEINLLTGESDT QQIEAEKKPTSALDEPVSHWRPRLALNVMADNFVFDGSSLPADVHRYMKMIQLGKTVHYLPILFIDQLSNRVKDL MVINRSTTELPLTVSYDKVSLGRLRFWIHMQDAVYSLQQFGFSEKDADEVKGIFVDTNLYFLALTFFVAAFHLLF DFLAFKNDISFWKKKKSMIGMSTKAVLWRCFSTVVIFLFLLDEQTSLLVLVPAGVGAAIELWKVKKALKMTIFWR GLMPEFQFGTYSESERKTEEYDTQAMKYLSYLLYPLCVGGAVYSLLNIKYKSWYSWLINSFVNGVYAFGFLFMLP QLFVNYKLKSVAHLPWKAFTYKAFNTFIDDVFAFIITMPTSHRLACFRDDVVFLVYLYQRWLYPVDKRRVNEFGE SYEEKATRAPHTD

PCT/US2003/028547

FIGURE 1547

PCT/US2003/028547

1674/6881 FIGURE 1548

PCT/US2003/028547

1675/6881 FIGURE 1549

CGACACAGTAGCATTTGTGCCAATTTCTGGTTGGAATGGTAACAACATGCTGGAGCCAAGTGCTAACATGCCTTG
GTTCAAGGGATGGAAAGTCACCCGTAAGGATGGCAATGCCAGTGGAACCATGCTGCTTGAGGCTCTGGACTGCAT
CCTACCACCAACTCGTCCAACTGACAAGCCCTTGCGCCTCTCCAGGATGTCTACAAAATTGGTGGTATTGG
TAGTGTTCCTGTTGGCCGAGTGGAGACTGGTATTCTCAAACCCGGTATGGTGGTCACCTTTGCTCCAGTCAACGT
TACAACAGAAGTAAAATCTGTCGAAATGCACCATGAAGCTTTGGGTGAAGCTCTTCCTGGGGACAGTGTGGGCTT
CCATGTCAAGAATGTGTCTGTCAAGGATGTTCGTCGTGGCAACGTTGCTGGTGACAGCAAAAAATGACCCACCAAT
GGAAGCAGCTGGCTTCACTGCTCAGGTGATTATCCTGAACCATCCAGGCCAAATAAGCGCTGGCTATGCCCCTGT
ATTGGATTGCCACACGGCTCATATTGCATGCAAGTTTGCTGAACCATCCACCTTTGGGTCGCTTTCTGTAA
TATGGTTCCTGGCAAGCCCATGTGTGCTGAGAGCTTCTCAGACTATCCACCTTTTGGGTCGCTTTTCGTGA
TATGAGACACACAGTTGCGGTGGTTCATCAAAGC

WO 2004/030615 PCT/US2003/028547

FIGURE 1550

GCCAAAATGGGAAAGGAAAAGACTCATATCAACATTGTCGTCATTGGACACGTAGATTCGGGCAAGTCCACCACT
ACTGGCCATCTGATCTATAAATGCAGTAGCATCGACAAAAGAACCATTGAAAAATTTGAGAAGGAGACTGCTGAG
ATGGGAAAGGGCTCTTTCAAGTATGGCTGGGTCTTGGATAAACTGAAAGCTGAGCGTGAACGTGGTATCACCATT
GATATCTCCTTGTGGAAATTTGAGACCAGCAAGTACTATGTGACTATCACTGATGCTCCAGGACACAGAGACTTC
ATCAAAAACATGATTACAGGGACATCTCAGGCTGACTGTGCTGTCCCGATTGTTGCTGCTGGTGTTGGTGAATTT
GAAGCTGGTATCTCTAAGAATGGGCAGACCCGAGAGCATGCCCTTCTGGCTTACACACTGGGTGTGAAACAACTA
ATTGTTGGTGTTAACAAAATGGATTCCACTGAGCCACCCTACAGCCAGAAGAGATATTGAGGAAATTGTTAAGGAA
GTCAGCACTTACATTAAGAAAATTGGCTACAACCCCGACACAGTAGCATTTGTGCCAAATTCTTGAAGTCCGGTG
ATGCTGCCATTGTTGATATGGTTCCTGGCAAGCCCATGTGTGCTGAGAGCTTCCAGACTATCCACCTTTGGGTC
GCTTTGCTGTTCGTGATATGAGACACACAGTTGCGGTGGTGTC

PCT/US2003/028547

FIGURE 1551

PCT/US2003/028547

1678/6881 FIGURE 1552

CTTTTCACAACGGGTTTGCCGCCAGAACACAGGTGTCATGAAAACTACCCCTAAAAGCCAAAATGGGAAAGGAA
AAGACTCATATCAACATTGTCGTCATTGGACACGTAGATTCGGGCAAGTCCACCACTACTGGCCATCTGATCTAT
AAATGCAGTAGCATCGACAAAAGAACCATTGAAAAATTTGAGAAGGAGACTGCTGAGATGGGAAAGGGCTCTTTC
AAGTATGGCTGGGTCTTGGATAAACTGAAAAGCTGAGCGTGAACGTGGTATCACCATTGATATCTCCTTGTGGAAA
TTTGAGACCAGCAAGTACTATGTGACTATCACTGATGCTCCAGGGATGTCTACAAAATTGGTGGTATTGGTAGTG
TTCCTGTTGGCCGAGTGGAGACTGGTATTCTCAAACCCGGTATGGTGGTCACCTTTGCTCCAGTCAACGTTACAA
CAGAAGTAAAATCTGTCGAAATGCACCATGAAGCTTTGGGTGAAGCTCTTCCTGGGGACAGTGTGGGCTTCCATG
TCAAGAATGTGTCTGTCAAGGATGTTCGTCGTGGCAACGTTGCTGGTGACAGCAAAAATGACCCACCAATGGAAG
CAGCTGGCTTCACTGCTCAGGTGATTATCCTGAACCATCCAGGCCAAATAAAGCGCTGGCTATGCCCCTGTATTGG
ATTGCCACACGGCTCATATTGCATGCAAGTTTGCTGAGCTGAAGAAAAGATTGATCGCCGTTCTGGTAAAAAGC
TGGAAGATGGCCCTAAATTCTTGAAGTCCGGTGATGCTCCCATTGTTGATATGGTTCCTGGCAAGCCCATGTGG

PCT/US2003/028547

1679/6881 FIGURE 1553

PCT/US2003/028547

FIGURE 1554

CTTTTTCACAACGGGTTTGCCGCCAGAACACAGGTGTCATGAAAACTACCCCTAAAAGCCAAAATGGGAAAGGAA
AAGACTCATATCAACATTGTCGTCATTGGACACGTAGATTCGGCCAAGTCCACCACTACTGGCCATCTGATCTAT
AAATGCAGTAGCATCGACAAAAGAACCATTGATATCTCCTTGTGGAAATTTGAGACCAGCAAGTACTATGTGACT
ATCACTGATGCTCCAGGACACAGAGACTTCATCAAAAACATGATTACAGGGACATCTCAGGCTGACTGTGCTGTC
CCGATTGTTGCTGCTGGTGTTGGTGAATTTGAAGCTGGTATCTCTAAGAATGGGCAGACCCGAGAGCATGCCCTT
CTGGCTTACACACTGGGTGTGAAACAACTAATTGTTGGTGTTAACAAAATGGATTCCACTGAGCCACCCTACAGC
CAGAAGAGATATGAGGAAATTGTTAAGGAAGTCAGCACTTACATTAAGAAAATTGGCTACAACCCCGACACAGTA
GCATTTGTGCCAATTTCTGGTTGGAATGGTAACAACATGCTGGAGCCCAAGTGCTAACATGCCTTGGTTCAAGGGA
TGGAAAGTCACCCGTAAGGATGGCAATGCCAGTGGAACCATGCTGCTTGAGGCTCTGGACTGCATCCTACCACCA
ACTCGTCCAACTGACAAGCCCTTGCGCCTGCCTCTCCAGGATGTCTACAAAATTGGTGGTATTGGTAGTTTCCT
GTTGGCCGAGTGGAGACTGGTATTCTCAAACCCGGTATGGTGGTCACCTTTGCTCCAGTCAACGTTACAACAGAA
GTTGTGGGCTTCCATGTCAAGAATGTGTCTGTCAAGGATGTTCGTGGTGCAACCATCAGCCAAAAAT
GACCCACCAATGGAAGCAGCTGGCTTCACTGCTCCAGGTGATTACCATCCAACAAAAAT
GACCCACCAATGGAAGCAGCTGGCTTCACTGCTCCAGGTGATTACCATCCAGCCAAAAAAT

PCT/US2003/028547

1681/6881 FIGURE 1555

TATAAATGCAGTAGCATCGACAAAAGAACCATTGAAAAATTTGAGAAGGAGACTGCTGAGATGGGAAAGGGCTCT
TTCAAGTATGGCTGGGTCTTGGATAAACTGAAAGCTGAGCGTGAACGTGGTATCACCATTGATATCTCCTTGTGG
AAATTTGAGACCAGCAAGTACTATGTGACTATCACTGATGCTCCAGGACACAGAGACTTCATCAAAAACATGATT
ACAGGGACATCTCAGGCTGACTGTGCTGTCCCGATTGTTGCTGCTGGTGTTGGTGAATTTGAAGCTGGTATCTCT
AAGAATGGGCAGACCCGAGAGCATGCCCTTCTGGCTTACACACTGGGTGTGAAACAACTAATTGTTGGTGTTAAC
AAAATGGATTCCACTGAGCCACCCTACAGCCAGAAGAGATATGAGGAAATTGTTAAGGAAGTCAGCACTTACATT
AAGAAAATTGGCTACAACCCCGACACAGTAGCATTTGTGCCAATTTCTGGTTGGAATGGTAACAACATGCTGGAG
CCAAGTGCTAACATGCCTTGGTTCAAGGGATGGAAAGTCACCCGTAAGGATGGCAATGCCAGTGGAACCATGCTG
CTTGAGGGCTCCAGTCAACGTTACAACAGAAGTAAAATCTGTCGAAATGCACCATGAAGCTTTGGGTGAAGCTCT
TCCTGGGGACAGTGTGGGCTTCCATGTCAAGAATGTGTCTGAAGGATGTTCGTCGTGGCAACGTTGCTGGTGA
CAGCAAAAATGACCCACCAATGGAAGCAGCTGGCTTCACTGCTCAGG

PCT/US2003/028547

FIGURE 1556

GTCGGCGTGTCGAGTGGCTCTTCCTGGCTGCTGAGGCGGGTTAAGGTCTGAGGGTCTTGTGGGGCCACGGCGCTG ATCACCAGGTGTTTGGCTTGGTCGGTTCTTATTTCTCGCCTGGCAATGGCGACGTACACCTGCATAACTTGCCGG GTGGCGTTCCGCGACGCGGACATGCAGCGGGCCCACTATAAGACGGACTGGCACCGCTACAACCTGCGGCGGAAG GTGGCCAGCATGGCCCCAGTGACCGCCGAGGGCTTCCAGGAGCGAGTGCGGGCGCAGCGGGCCGTCGCGGAGGAG GAGAGCAAGGGCTCGGCCACCTACTGCACCGTTTGCAGTAAGAAGTTTGCCTCTTTCAACGCCTACGAGAACCAC GAAAAGAACTTGGAGAAAGGACTGGGCGTGGACAGTGTGGACAAGGATGCCATGAACGCGGCCATCCAGCAGGCC ATCAAGGCCCAGCCGTCCATGTCTCCCAAGAAGGCGCCCCCAGCGCCTGCAAAGGAGGCCAGGAATGTCGTGGCC GTGGGTACTGGTGGCCGTGGGACCCACGACCGAGACCCGAGTGAGAAACCACCCCGGCTCCAGTGGTTTGAACAG GAAGATATTGATTCTGATGAAGAATTGGAATGTGAGGATACTGAAGCAATGGACGATGTGGTGGAGCAGGATGCA GAGGAGGAAGAGGCTGAGGAAGGCCCACCCTTGGTGCCATCCCTATCACGGACTGCTTATTTTGTTCCCATCAT TCCAGCTCGCTGATGAAGAATGTGGCTCACATGACCAAAGACCACAGTTTCTTTATTCCTGATATAGAATATCTT TCAGATATTAAGGGACTGATTAAATACTTGGGAGAGAAAGTTGGTGTTGGCAAGATTTGCTTGTGGTGCAACGAG GACCCCAATAAGGCTGAGGAGTTGCCCTCAGAAAAGAACTTGGAATATGATGATGAAACCATGGAATTGATTCTG CCTTCTGGTGCCAGAGTGGGTCATCGCTCCTTGATGAGATACTACAAACAGCGATTTGGCTTGTCAAGAGCTGTG GCAGTTGCCAAAAATCGGAAGGCCGTGGGCCGAGTACTTCAGCAGTACAGAGCCCTGGGATGGACTGGCAGCACA GGAGCGGCTCTTATGCGAGAGCGAGACATGCAGTATGTCCAAAGGATGAAATCAAAATGGATGCTGAAGACAGGA ATGAAGAACAATGCCACCAAGCAGATGCACTTTCGGGTCCAAGTGAGATTCTGAGAGTCTGCTGGGATTGAGCAA TCATCTCCTGCCCAAGTTTCCTCCTTGCCCTGAGGACCAGTGAAAGACAGATCATAGGAGAGACCCTTTTGCTGC TACTTCATTCGTTCTGACCTAATAATAAAAGTTAGAACCAT

PCT/US2003/028547

FIGURE 1557

GAACTCCAAGATGGGAGGCAAGCTCAGCAAGAAGAAGAAGGGCTACAATGTGAACGACGAGAAAGCCAAGGAGAA TGCTGAGGCCGCCGGGCCCGGCCGAGAGCGCGCCCCTGCCGCGGGGAGGAGCCCAGCAAGGAGGAAGGGGA ACCCAAAAAGACTGAGGCGCCCGCAGCTCCTGCCGCCCAGGAGACCAAAAGTGACGGGGCCCCAGCTTCAGACTC AAAACCCGGCAGCTCGGAGGCTGCCCCCTCTTCCAAGGAGACCCCCGCAGCCACGGAAGCGCCTAGTTCCACACC CAAGGCCCAGGGCCCCGCAGCCTCTGCAGAAGAGCCCAAGCCGGTGGAGGCCCCGGCAGCTAATTCCGACCAAAC ACTAACTTGTTTCAAATTGGAAGTAATGATATGTATTGCCCAAGGAAAAATACAGGATGTTGTCCCATCAAGGGA GGGAGGGGGGGAGAATCCAAATAGTATTTTTGTGGGGAAATATCTAATATACCTTCAGTCAACTTTACCAAGA AGTCCTGGATTTCCAAGATCCGCGTCTGAAAGTGCAGTACATCGTTTGTACCTGAAACTGCCGCCACATGCACTC CTCCACCGCTGAGAGTTGAATAGCTTTTCTTCTGCAATGGGAGTTGGGAGTGATGCGTTTGATTCTGCCCACAGG CAATGCCAATCCTCCATTCTTCCTCCCAGATATTTTTGGGAGTGACAAACATTCTCTCATCCTACTTAGCCTAC CTAGATTTCTCATGACGAGTTAATGCATGTCCGTGGTTGGGTGCACCTGTAGTTCTGTTTATTGGTCAGTGGAAA TG

PCT/US2003/028547

FIGURE 1558

MGGKLSKKKKGYNVNDEKAKEKDKKAEGAATEEEGTPKESEPQAAAEPAEAKEGKEKPDQDAEGKAEEKEGEKDA AAAKEEAPKAEPEKTEGAAEAKAEPPKAPEQEQAAPGPAAGGEAPKAAEAAAAPAESAAPAAGEEPSKEEGEPKK TEAPAAPAAQETKSDGAPASDSKPGSSEAAPSSKETPAATEAPSSTPKAQGPAASAEEPKPVEAPAANSDQTVTV KE

PCT/US2003/028547

FIGURE 1559

PCT/US2003/028547

1686/6881 FIGURE 1560

 ${\tt MSYYFDRDDVALKNFAKYFLHQSHEEREHAEKLMKLQNQGGGRIFLQDIKKPDCDDWESGLNAMECALHLEKNVNQSLLELHKLATDKNDPHLCDFIETHYLNEQVKAIKELGDHMTNLCKMGAPESSLAEYLFDQHTLGDSDNES$

PCT/US2003/028547

FIGURE 1561

ATGCCCAAAACGATCAGTGTGCGTGTGACCACCATGGACGCAGAGCTGGAGTTTACCATCCAGCCCAACACCACC GCCAAGTTCTACCCTGAGGATGTGTCCGACCGAGGAATTGATTCAGGACACCACTCAGCGTCTGTTCCTTCTGCA ATGAAAGAGGGCATTCTCAGTGATGATATTTACTGCCGGCCTGAGACTGCTGTGCTGCTGCCCCATGCTGTC CAGTCTAAGTATGGGAACTTCAGTAAGGAGGTGCATAAGTCTGGCTACCTGGCCGGAGACGAGTTGCTCCCACAG AGAGTCCTGGAACAGCACAAACTCAGCAAGGACCAGTGGGAGGAGCGGATCCAGGTGTGGCATGAGGAACACCGT GGCATGCTCAGGGAGGATGCTGTCCTGGAGTATCTGAAGATTGCTCAAGATCTGGAGATGTATGGTGTAAACTAC TTCAGCATCAAGAAAAAGAAAGGCTCAGAGCTGTGGCTGGGGGTGGATGCACTGGGTCTCAACATCTATGAGCAG GTCATCAAGCCCATTGACAAAAGAGCCCCGGACTTTGTCTTCTATGCTCCCTGGCTGCAGATTAACAAGCGGATC TTGGCCTTGTGCATGGGGAACCGTGAACTATACATGCGCCGTCGCAAGCCTGACACCATTGAGGTGCAGCAGATG AAGGCACGGGCCCGGGAGGAGAAGCACCAGAAGCAGATGGAGCGTGCTATGCTGGAAAATGAGAAGAAGCGTGAA ATGGCAGAAAAGCAGAAAGAAGATTGAACGGGAGAAGGAGCTGATGGGGAGGCTGAAGCAGATCGAGGAACAG ATGGAGTGGCAGCAGAAGGCCCAGATGGTACAGGAAGACTTGGAGAAGACCCGTGCTGAGCTGAAGACTGCCATG AGTACATCTCATGTGGCAGAGCCTGCTGAGAATGAGCAGGATGAGCAGGATGAGAATGGGGCAGAGGCTAGTGCT GACCTACGGCCTGATGCTATGGCCAAGGACCGCAGTGAGGAGAATGTACCACTGAGGCAGAGAAGAATGAGCGT GTGCAGAAGCACCTGAAGGCCCTCACTTCGGAGCTGGCCAGTGCCCGAGATGAGTCCAAGAAGACTGCCAATGAC ATGATCCATGCTGAGAACATGTGA

PCT/US2003/028547

1688/6881 FIGURE 1562

<u>ATG</u>CCGCCCTCGCCTGCGTCCTGCGGCCGTCCCGAGGTGTCACGCTGTCAACAACACAAAGTCGTAGTTGACGTC
GACCATGAGCACTTAGCAGGAGGGCACGCACAGGGACTTGTGCCCGGGGGGTCCAGCTCCTGCACCTTCAGCTG
CCACTCCATCCTCTGCACAGCGTTCAGGGCCGCAGCCTCGTGCTGCTGCCGCATGAGGAAGAACTAGATGAA
CTTATGAGTGAAGAAGCCTATGAGAAATACATAAAATCTATTGAGGAG<u>TGA</u>

PCT/US2003/028547

1689/6881 FIGURE 1563

MPPSPASCGRPEVSRCQQHKVVVDVDHEHLAGGHAQGLVPGGVQLLHLQLPLHPLHSVQGRSLVLLPHEEEELDE LMSEEAYEKYIKSIEE

PCT/US2003/028547

1690/6881 FIGURE 1564

PCT/US2003/028547

1691/6881 FIGURE 1565

CCGAGGCCAAGTCCCGGGCGCTAGCCCACCTCCCACCGCCTCTTGGCTCCTCTAGGCCGTCGCTTTCGG GTTCTCTCATCGCTTCGTCGTTCGCCA**ATG**TTTGAGGAGAAGGCCAGCAGTCCTTCAGGGAAGATGGGAGGCGAG GGAGGTCGAGCTGAGTTGAATCCTTGGCCTGAATATATTTACACACGTCTTGAGATGTATAATATACTAAAAGCA GAACATGATTCCATTCTGGCAGAAAAGGCAGAAAAAGATAGCCAAGTCAATTAAAGTCACTTTGCCTGATGGTAAA CAGGTTGATGCGGAATCTTGGAAAACTACACCATATCAAATTGCCTGTGGAATTAGTCAAGGCCTGGCCGACAAC ACCGTTATTGCTAAAGTAAATAATGTTGTGTGGGACCTGGACCGCCCTCTGGAAGAAGATTGTACCTTGGAGCTT CTCAAGTTTGAGGATGAGGAAGCTCAGGCAGTGTATTGGCACTCTAGTGCTCACATAATGGGTGAAGCCATGGAA AGAGTCTATGGTGGATGTTTATGCTACGGTCCGCCAATAGAAAATGGATTCTATTATGACATGTACCTCGAAGAA GGGGGTGTGTCTAGCAATGATTTCTCTTCTGGAGGCTTTGTGTAAGAAAATCATTAAAGAAAAACAAGCTTTT GAAAGACTGGAAGTTAAGAAAGAAACTTTACTGGCAATGTTTAAGTACAACAAGTTCAAATGCCGGATATTGAAT GAAAAGGTGAATACTCCAACTACCACAGTCTATAGATGTGGCCCTTTGATAGATCTCTGCCGGGGTCCTCATGTT AGACACACGGGCAAAATTAAGGCTTTAAAAATACACAAAAATTCCTCCACGTACTGGGAAGGCAAAGCAGATATG GAGACTCTCCAGAGAATTTATGGCATTTCATTCCCAGATCCTAAAATGTTGAAAGAGTGGGAGAAGTTCCAAGAG AGTTGCTTTTTTCTGCCAAAAGGAGCCTACATTTATAATGCACTTATTGAATTCATTAGGAGCGAATATAGGAAA AGAGGATTCCAGGAGGTAGTCACCCCAAACATCTTCAACAGCCGACTCTGGATGACCTCGGGCCACTGGCAGCAC TACAGCGAGAACATGTTCTCCTTTGAGGTGGAGAAGGAGCTGTTTGCCCTGAAACCCATGAACTGCCCAGGACAC TGCCTTATGTTTGATCATCGGCCAAGGTCCTGGCGAGAACTGCCTCTGCGGCTAGCTGATTTTGGGGTACTTCAT AGGAACGAGCTGTCTGGAGCACTCACAGGACTCACCCGGGTACGAAGATTCCAACAGGATGATGCTCACATATTC TTTTCTTTTAAACTAAACCTTTCTACTCGCCCGGAAAAATTCCTTGGAGATATCGAAGTATGGGATCAAGCTGAG AAACAACTTGAAAACAGTCTGAATGAATTTGGTGAAAAGTGGGAGTTAAACTCTGGAGATGGAGCTTTCTATGGC CCAAAGATTGACATACAGATTAAAGATGCGATTGGGCGGTACCACCAGTGTGCAACCATCCAGCTGGATTTCCAG TTGCCCATCAGATTTAATCTTACTTATGTAAGCCATGATGGTGATGATAAGAAAAGGCCAGTGATTGTTCATCGA GCCATCTTGGGATCAGTGGAAAGAATGATTGCTATCCTCACAGAAAACTATGGGGGCAAATGGCCCTTTTGGCTG TCCCCTCGCCAGGTAATGGTAGTTCCAGTGGGACCAACCTGTGATGAATATGCCCAAAAGGTACGACAACAATTC CACGATGCCAAATTCATGGCAGACATTGATCTGGATCCAGGCTGTACATTGAATAAAAAGATTCGAAATGCACAG TTAGCACAGTATAACTTCATTTTAGTTGTTGGTGAAAAAGAGAAAATCAGTGGCACTGTTAATATCCGCACAAGA GACAATAAGGTCCACGGGGAACGCACCATTTCTGAAACTATCGAGCGGCTACAGCAGCTCAAAGAGTTCCGCAGC AAACAGGCAGAAGAAGTTT**TAA**TGAAAAAATTACCCAGATTGGCTCCATGGAAAAGGAGGAACAGCGTTTCCG TAAAATTGACTTTGTACTCTGAAAACGTCAATTTATATTGAACTTGGAGGAGTTTGGCAAAGTCTGAATAGGTCA CCAATAAAATGATTTTACTCATTCAGTATCTGAGTACTGGAAGTGAAACATGAGGAATGCTTTAGTGTAATGTGG GAGAACTTTTTTGTAAATTTAATGCAATTGAAAAAGTTTTCAAATTCAATTAAGATAACTAGAATTGGATTATGG **TGTAA**

PCT/US2003/028547

FIGURE 1566

MFEEKASSPSGKMGGEEKPIGAGEEKQKEGGKKKNKEGSGDGGRAELNPWPEYIYTRLEMYNILKAEHDSILAEK AEKDSKPIKVTLPDGKQVDAESWKTTPYQIACGISQGLADNTVIAKVNNVVWDLDRPLEEDCTLELLKFEDEEAQ AVYWHSSAHIMGEAMERVYGGCLCYGPPIENGFYYDMYLEEGGVSSNDFSSLEALCKKIIKEKQAFERLEVKKET LLAMFKYNKFKCRILNEKVNTPTTTVYRCGPLIDLCRGPHVRHTGKIKALKIHKNSSTYWEGKADMETLQRIYGI SFPDPKMLKEWEKFQEEAKNRDHRKIGRDQELYFFHELSPGSCFFLPKGAYIYNALIEFIRSEYRKRGFQEVVTP NIFNSRLWMTSGHWQHYSENMFSFEVEKELFALKPMNCPGHCLMFDHRPRSWRELPLRLADFGVLHRNELSGALT GLTRVRRFQQDDAHIFCAMEQIEDEIKGCLDFLRTVYSVFGFSFKLNLSTRPEKFLGDIEVWDQAEKQLENSLNE FGEKWELNSGDGAFYGPKIDIQIKDAIGRYHQCATIQLDFQLPIRFNLTYVSHDGDDKKRPVIVHRAILGSVERM IAILTENYGGKWPFWLSPRQVMVVPVGPTCDEYAQKVRQQFHDAKFMADIDLDPGCTLNKKIRNAQLAQYNFILV VGEKEKISGTVNIRTRDNKVHGERTISETIERLQQLKEFRSKQAEEEF

PCT/US2003/028547

FIGURE 1567

PCT/US2003/028547

1694/6881 FIGURE 1568

GGCGCCGGGGATTGGGAGGGCTTCTTGCAGGCTGCTGGGCTGAGGCTAAGGGCTGCTCAGTTTCCTTCAGCGGGG $\texttt{CACTGGGAAGCGCC} \underline{\textbf{ATG}} \texttt{GCACTGCAGGGCATCTCGGTCGTGGAGCTGTCCGGCCCCGGGCCCGTTCTGTG}$ CTATGGTCCTGGCTGACTTCGGGGCGCGTGTGGTACGCGTGGACCGGCCCGGCTCCCGCTACGACGTGAGCCGCT TGGGCCGGGGCAAGCGCTCGCTAGTGCTGGACCTGAAGCAGCCGCGGGGAGCCGCCGTGCTGCGGCGTCTGTGCA AGCGGTCGGATGTGCTGCTGGAGCCCTTCCGCCGCGGTGTCATGGAGAAACTCCAGCTGGGCCCAGAGATTCTGC AGCGGGAAAATCCAAGGCTTATTTATGCCAGGCTGAGTGGATTTGGCCAGTCAGGAAGCTTCTGCCGGTTAGCTG GCCACGATATCAACTATTTGGCTTTGTCAGGTGTTCTCTCAAAAATTGGCAGAAGTGGTGAGAATCCGTATGCCC CGCTGAATCTCCTGGCTGACTTTGCTGGTGGTGGCCTTATGTGTGCACTGGGCATTATAATGGCTCTTTTTGACC GGAAAACTCAGAAATCGAGTCTGTGGGAAGCACCTCGAGGACAGAACATGTTGGATGGTGGAGCACCTTTCTATA CGACTTACAGGACAGCAGATGGGGAATTCATGGCTGTTGGAGCAATAGAACCCCAGTTCTACGAGCTGCTGATCA AAGGACTTGGACTAAAGTCTGATGAACTTCCCAATCAGATGAGCATGGATGATTGGCCAGAAATGAAGAAGAAGT TTGCAGATGTATTTGCAAAGAAGACGAAGGCAGAGTGGTGTCAAATCTTTGACGGCACAGATGCCTGTGTGACTC CGGTTCTGACTTTTGAGGAGGTTGTTCATCATGATCACAACAAGGAACGGGGCTCGTTTATCACCAGTGAGGAGC AGGACGTGAGCCCCGCCCTGCACCTCTGCTGTTAAACACCCCAGCCATCCCTTCTTTCAAAAGGGATCCTTTCA TAGGAGAACACTGAGGAGATACTTGAAGAATTTGGATTCAGCCGCGAAGAGATTTATCAGCTTAACTCAGATA AAATCATTGAAAGTAATAAGGTAAAAGCTAGTCTCTAACTTCCAGGCCCACGGCTCAAGTGAATTTGAATACTGC ATTTACAGTGTAGAGTAACACATAACATTGTATGCATGGAAACATGGAGGAACAGTATTACAGTGTCCTACCACT CTAATCAAGAAAAGAATTACAGACTCTGATTCTACAGTGATGATTGAATTCTAAAAATGGTTATCATTAGGGCTT TTGATTTATAAAACTTTGGGTACTTATACTAAATTATGGTAGTTATTCTGCCTTCCAGTTTGCTTGATATATTTG TTGATATTAAGATTCTTGACTTATATTTTGAATGGGTTCTAGTGAAAAAGGAATGATATATTCTTGAAGACATCG ATATACATTTATTTACACTCTTGATTCTACAATGTAGAAAATGAGGAAATGCCACAAATTGTATGGTGATAAAAG TCACGTGAAACAGAGTGATTGCTTGCATCCAGGCCTTTTGTCTTGGTGTTCATGATCTCCCTCTAAGCACATTCC AAACTTTAGCAACAGTTATCACACTTTGTAATTTGCAAAGAAAAGTTTCACCTGTATTGAATCAGAATGCCTTCA TAGGGTTGCCTGTATCCAGTAACTCGGGGCCTGTTTCCCCGTGGGTCTCTGGGCTGTCAGCTTTCCTTTCTCCAT **ATCTCAGGACCCCCC**

PCT/US2003/028547

1695/6881 FIGURE 1569

MALQGISVVELSGLAPGPFCAMVLADFGARVVRVDRPGSRYDVSRLGRGKRSLVLDLKQPRGAAVLRRLCKRSDV LLEPFRRGVMEKLQLGPEILQRENPRLIYARLSGFGQSGSFCRLAGHDINYLALSGVLSKIGRSGENPYAPLNLL ADFAGGGLMCALGIIMALFDRTRTGKGQVIDANMVEGTAYLSSFLWKTQKSSLWEAPRGQNMLDGGAPFYTTYRT ADGEFMAVGAIEPQFYELLIKGLGLKSDELPNQMSMDDWPEMKKKFADVFAKKTKAEWCQIFDGTDACVTPVLTF EEVVHHDHNKERGSFITSEEQDVSPRPAPLLLNTPAIPSFKRDPFIGEHTEEILEEFGFSREEIYQLNSDKIIES NKVKASL

PCT/US2003/028547

1696/6881 FIGURE 1570

TCTTTCTGGTCTCGGCCGCAGAAGCGAGATGACGAAGGGAACGTCATCGTTTGGAAAGCGTCGCAATAAGACGCA
CACGTTGTGCCGCCGCTGTGGCTCTAAGGCCTACCACCTTCAGAAGTCGACCTGTGGCAAATGTGGCTACCCTGC
CAAGCGCAAGAGAAAGTATAACTGGAGTGCCAAGGCTAAAAGACGAAATACCACCGGAACTGGTCGAATGAGGCA
CCTAAAAATTGTATACCGCAGATTCAGGCATGGATTCCGTGAAGGAACAACACCTAAACCCAAGAGGGCAGCTGT
TGCAGCATCCAGTTCATCT<u>TAA</u>GAATGTCAACGATTAGTCATGCAATAAATGTTCTGGTTTTAAAAAATAC

PCT/US2003/028547

1697/6881 FIGURE 1571

 ${\tt MTKGTSSFGKRRNKTHTLCRRCGSKAYHLQKSTCGKCGYPAKRKRKYNWSAKAKRRNTTGTGRMRHLKIVYRRFR\\ HGFREGTTPKPKRAAVAASSSS}$

PCT/US2003/028547

FIGURE 1572

GTGTCTGTGGGAGGTTATGTTTATTTGAGACTTCTCCATCGGGATCGCCTGGTGTCACCAAGTGTCCACTGGTAC TGAGGTTTGCTGCCTGCCTTCTTGCCATGTCTAACGAAGTAGAAACAAGTGCAACCAATGGTCAGCCCGACCAAC AGGCCGCACCAAAAGCACCCTCAAAGAAGAAAAAAAAGGCCCTGAAAAGACAGATGAATATCTCTTAGCAA GGTTCAAAGGCGATGGTGTAAAATATAAGGCCAAGCTGATTGGCATTGATGTGCCAGATGCAAGAGGGGGATA GGATCTGGGTCAACATTTCCCTTTCTGGGATAAAAATAATTGATGAGAAAACTGGGGTAATAGAGCATGAACATC GCCAGCATCAGTTTTTTGCCATAAAAACCGGGCAACAGGCTGAACCATTAGTTGTTGATCTTAAAGACCTTTTTC AAGTTATCTATAATGTAAAGAAAAAGGAAGAAGAAAAAGAAAAAGATAGAGGAAGCCAGCAAAGCAGTTGAGAATG GGGACATGTCTACACCTCCTGACCTAAATAGTCCAACAGAAAGCAAAGATATCCTGTTAGTGGATCTAAACTCTG AAATCGACACCAATCAGAATTCTTTAAGAGAAAATCCATTCTTAACAAACGGCATCACCTCCTGTTCTCTTCCTC GACCAACGCCTCAGGCATCCTTCTTGCCTGAAAATGCCTTTTCTGCCAACTTCAACTTCTTTCCCACCCCTAATC CTGATCCTTTCCGTGACGATCCTTTCACACAGCCAGACCAATCGACACCTTCTTCGTTTGATTCTCTCAAATCTC CAGATCAGAAGAAAGAGAATTCGAGTAGCTCGTCTACTCCGCTGAGTAATGGGCCCCTGAATGGTGATGTTGACT CAAGTTCGCAAACCCAGCCAGCAGTGAGAACTCAAAATGGGGTATCTGAAAGAGAACAGAACGGCTTCTCTGTCA AATCCTCCCGAACCCTTTTGTGGGAAGCCCTCCCAAAGGACTGTCCATACAGAATGGCGTAAAGCAGGACTTGG AAAGCTCTGTCCAGTCCTCACCACATGACTCCATAGCCATTATCCCACCTCCACAAAGTACCAAACCAGGAAGAG CAGGCCAGGCGTCACCCACAGGACAACCTACAGCCCTGCAGCCCCAACCCTCTGGATCTCTTCAAAACAAGTGCTC GCATCTTTGGTCTTCAATCAGTCCCCTTCAATGGCTCCGGGAGCCATGATGGGTGGTCAACCTTCAGGTTTTAGT CAGCCCGTCATTTTTGGTACAAGTCCAGCTGTTTCAGGTTGGAACCAGCCTTCACCCTTTGCAGCCTCAACTCCC CCTCCAGTGCCTGTTGTCTGGGGCCCTTCTGCATCTGTGGCACCCAATGCTTGGTCAACAACAAGCCCTTTGGGG GTCACTCCTCCAGCCCCCCCAGAGCTGGCCCTCCCAAGGACATCTCCAGTGATGCCTTCACTGCCTTAGAC CCACTTGGGGATAAAGAGATCAAGGATGTGAAAGAAATGTTTAAGGATTTCCAACTGCGGCAGCCACCTGCTGTG CCCGCGCGAAGGGAGACCAGACTTCTTCTGGGACTTTGAGTGCCTTTGCCAGTTATTTCAACAGCAAGGTTGGC ATTCCTCAGGAGAATGCAGACCATGATGACTTTGATGCTAATCAACTATTGAACAAGATCAATGAACCACCAAAG TCTTTTGGTTCATCACAAGCCTCTGTGGCTTCTTCTCAACCTGTATCTTCTGAGATGTATAGGGATCCATTTGGA AATCCTTTTGCCTAAATTCTGAACTTGGTCTGCAGACCATCCAGAGGAATAAAAAGGTTGGCCTTAGTAGTCAAA AACAAAGCTGATAGCCAGACACGTTCTGATTTCTGCCCTTGTTCCAGCTTTTGACGTATTATCTGTTGCCTTATTT CTCATTGCCTCTTCTACTTGTAAAATGCTTTTCACTTTCTGTCTAGGTTAAAGCTAAACTGAATCTATGGCTTTA AATAAATTAAGATCCTAAACTCTCTAGCTTAAGTGTAAATGAAGTACAGTAGTTTCCCTACTGAACCCTGCCTCT TGTGTCCCTGGAACCTTCTAGAACACCTGCCTTCTACCCTCTGGTTGGGAGATGCAGCCACCACATCCCTTCATA TCATACTGTTTTGAATAAATTTTCAAATCCTTATTGTTCAGAGTTGTTTGGGGGGTTCTGTTTCAGAGCATAAAAC CTAAAGGTTATAGTAGAACAAGGCACCTTCTTAAAAGAAATCTTGCTTCAGACCATCAGTTACAGAGAATTTCTA AAGTAAAATTGAAGCAACTACAACTTCTCCTTAGACACTTTGGAATCTAACCACTTAAGGACCTTTTTAAAGAGA TGGGTTCAAGTAGTATTACCACCCTTTCACAAGCAACAGACTCTCACAGGGC

PCT/US2003/028547

FIGURE 1573

TAGGATGGAAAGGCAGATGTAAAGTCCCTCATGCCGAAATATAACACGGGGGGCAACCCGACAGAGGATGTCTCA AACCAAGGAAATGCCAGCCCTCCTGCAGGACCCAGCAATGTACCTAAGTTTGGGTCCCCAAAGCCACCTGTGGCA GTCAAACCTTCTTCTGAGGAAAAGCCTGACAAGGAACCCAAGCCCCCGTTTCTAAAGCCCACTGGAGCAGGCCAA AGATTCGGAACACCAGCCAGCTTGACCACCAGAGACCCCGAGGCGAAAGTGGGATTTCTGAAACCTGTAGGCCCC AAGCCCATCAACTTGCCCAAAGAAGATTCCAAACCTACATTTCCCTGGCCTCCTGGAAACAAGCCATCTCTTCAC AGTGTAAACCAAGACCATGACTTAAAGCCACTAGGCCCGAAATCTGGGCCTACTCCTCCAACCTCAGAAAATGAA CAGAAGCAACCGTTTCCCAAATTGACTGGGGTTAAAGGGAAATTTATGTCAGCATCACAAGATCTTGAACCCAAG CCCCTCTTCCCCAAACCCGCCTTTGGCCAGAAGCCGCCCCTAAGTACCGAGAACTCCCATGAAGACGAAAGCCCC ATGAAGAATGTGTCTTCATCAAAAGGGTCCCCAGCTCCCCTGGGAGTCAGGTCCAAAAGCGGCCCTTTAAAACCA GCAAGGGAAGACTCAGAAAATAAAGACCATGCAGGGGAGATTTCAAGTTTGCCCTTTCCTGGAGTGGTTTTGAAA GCTAAGAACACCTTCCAGAGCAAAATAAATCAGGAAGAGTTGGCCTCAGGGACTCCTCCTGCCAGGTTCCCTAAG GCCCCTTCTAAGCTGACAGTGGGGGGCCCATGGGGCCCAAAGTCAGGAAAAGGAAAAGGGAGACAAGAATTCAGCC ACCCCGAAACAGAAGCCATTGCCTCCCTTGTTTACCTTGGGTCCACCTCCACCAAAACCCAACAGACCACCAAAT GTTGACCTGACGAAATTCCACAAAACCTCTTCTGGAAACAGTACTAGCAAAGGCCAGACGTCTTACTCAACAACT TCCCTGCCACCACCTCCACCATCCGGCCAGCCAACCACCATTGCCAGCATCTCACCCATCACAACCACCA GTCCCAAGCCTACCTCCCAGAAACATTAAACCTCCGTTTGACCTAAAAAGCCCTGTCAATGAAGACAATCAAGAT GGTGTCACGCACTCTGATGGTGCTGGAAATCTAGATGAGGAACAAGACAGTGAAGGAGAAACATATGAAGACATA GAAGCATCCAAAGAAAGAGAAGAAAAGGGAAAAGGAAGAAAGGAGGTTAGAGCTGGAGAAAAAGGAACAG CGCATCACAGACAACCCAGAAGGAAAATGGTTGGGCAGAACAGCAAGGGGTTCATATGGCTATATTAAAACAACT GCTGTAGAGATTGACTATGATTCTTTGAAACTGAAAAAAGACTCTCTTGGTGCCCCTTCAAGACCTATTGAAGAT GACCAAGAAGTATATGATGATGTTGCAGAGCAGGATGATATTAGCAGCCACAGTCAGAGTGGAAGTGGAGGGATA TTCCCTCCACCACCAGATGATGACATTTATGATGGGATTGAAGAGGAAGATGCTGATGATGGTTTCCCTGCTCCT CCTAAACAATTGGACATGGGAGATGAAGTTTACGATGATGTGGATACCTCTGATTTCCCTGTTTCATCAGCAGAG ATGAGTCAAGGAACTAATTTTGGAAAAGCTAAGACAGAAGAAAAGGACCTTAAGAAGCTAAAAAAAGCAGGAAAAA GAAGAAAAGACTTCAGGAAAAAATTTAAATATGATGGTGAAATTAGAGTCCTATATTCAACTAAAGTTACAACT TCCATAACTTCTAAAAAGTGGGGAACCAGAGATCTACAGGTAAAACCTGGTGAATCTCTAGAAGTTATACAAACC ACAGATGACAAAAGTTCTCTGCAGAAATGAAGAAGGGAAATATGGTTATGTCCTTCGGAGTTACCTAGCGGAC ${\tt AATGATGGAGAGATCTATGATGATATTGCTGATGGCTGCATCTATGACAATGAC} {\tt ACTCAACTTTGGTCATT}$

PCT/US2003/028547

FIGURE 1574

MAKYNTGGNPTEDVSVNSRPFRVTGPNSSSGIQARKNLFNNQGNASPPAGPSNVPKFGSPKPPVAVKPSSEEKPD KEPKPPFLKPTGAGQRFGTPASLTTRDPEAKVGFLKPVGPKPINLPKEDSKPTFPWPPGNKPSLHSVNQDHDLKP LGPKSGPTPPTSENEQKQAFPKLTGVKGKFMSASQDLEPKPLFPKPAFGQKPPLSTENSHEDESPMKNVSSSKGS PAPLGVRSKSGPLKPAREDSENKDHAGEISSLPFPGVVLKPAASRGGLGLSKNGEEKKEDRKIDAAKNTFQSKIN QEELASGTPPARFPKAPSKLTVGGPWGQSQEKEKGDKNSATPKQKPLPPLFTLGPPPPKPNRPPNVDLTKFHKTS SGNSTSKGQTSYSTTSLPPPPPSHPASQPPLPASHPSQPPVPSLPPRNIKPPFDLKSPVNEDNQDGVTHSDGAGN LDEEQDSEGETYEDIEASKEREKKREKEEKKRLELEKKEQKEKEKKEQEIKKKFKLTGPIQVIHLAKACCDVKGG KNELSFKQGEQIEIIRITDNPEGKWLGRTARGSYGYIKTTAVEIDYDSLKLKKDSLGAPSRPIEDDQEVYDDVAE QDDISSHSQSGSGGIFPPPPDDDIYDGIEEEDADDGFPAPPKQLDMGDEVYDDVDTSDFPVSSAEMSQGTNFGKA KTEEKDLKKLKKQEKEEKDFRKKFKYDGEIRVLYSTKVTTSITSKKWGTRDLQVKPGESLEVIQTTDDTKVLCRN EEGKYGYVLRSYLADNDGEIYDDIADGCIYDND

PCT/US2003/028547

FIGURE 1575

 $\tt GTTCCCCTGCAGTTGTTTGGGCTGTCCCTGTGGCTGGTTCTGGGGTGTGCGGCCAGCC{\color{red} \underline{ATG}}{GAGCGCTCTGGGCCC}$ CAGCGAAGTGACAGGCTCAGACGCGCGGACCGGACCCGCAGCTTGCGGTCACCATGGGCTTCACGGGGTTCGG TAAAAAGCTCGCACATTTGACTTGGAAGCAATGTTTGAACAAACTCGAAGGACAGCTGTGGAAAGAAGTCGCAA GCCAACATCCTCAAGATCAAATGTGGTCAGAGATTGCTCCAAATCATCTTCCAGGGATACGAGCAGCAGTGAAAG TGAACAGAGTTCTGACTCTTCTGATGATGAGTTAATTGGCCCTCCTTTACCCCCTAAAATGGTAGGAAAACCAGT TAATTTTATGGAGGAAGATATCCTCGGTCCTTTACCTCCACCTCTTAATGAAGAAGAAGAAGAAGAAGCAGAGGAAGA AGAAGAGGAAGAGGAAGAGGAAAATCCTGTTCACAAGATTCCTGACTCGCATGAGATAACGCTGAAGCATGG CACTAAAACAGTGTCTGCTTTGGGTCTGGATCCCTCAGGTGCCCGTTTGGTGACAGGAGGATATGACTATGATGT TAAGTTTTGGGATTTTGCTGGAATGGATGCTTCTTTTAAGGCATTTCGATCCCTTCAGCCCTGTGAGTGCCATCA GATCAAGTCATTACAGTATAGTAACACAGGAGACATGATTCTTGTTGTATCTGGAAGCTCTCAGGCCAAGGTGAT TGACAGAGATGGTTTTGAAGTAATGGAATGTATAAAAGGAGACCAGTATATTGTGGACATGGCCAACACCAAGGG TCATACAGCAATGCTTCATACTGGCTCATGGCATCCCAAAATAAAGGGAGAATTTATGACTTGCTCAAATGATGC GACTGTGAGGACGTGGGAAGTTGAAAATCCAAAGAAGCAAAAAAGTGTGTTTAAACCACGGACGATGCAAGGCAA ACAGATCTGGGACCGAAATTTGACTGTTCATCCTAAGTTCCACTATAAACAGGCTCATGACTCGGGCACAGACAC TTCTTGCGTGACTTTTCCTATGATGGTAATGTCCTTGCCTCTCGTGGAGGTGACGATTCATTAAAATTATGGGA CAGTCCAGATGATAAGCTCATAGTCACTGGTACATCTATTCAAAGAGGATGTGGCAGCGGCAAACTTGTTTTCTT TGAGCGTAGGACTTTCCAAAGGGTGTATGAAATAGACATCACAGATGCGAGTGTTGTTCGCTGCCTGTGGCATCC AAAGCTGAACCAGATCATGGTTGGAACTGGAAATGGATTGGCTAAAGTCTATTACGACCCCAACAAGAGTCAGAG GGGAGCAAAATTATGTGTGGTTAAAACCCAGCGGAAGGCAAAACAAGCTGAGACTCTAACTCAGGACTACATCAT CACCCCTCATGCCTTGCCTATGTTCCGTGAGCCCCGCCAACGGAGTACAAGGAAACAGCTGGAGAAGGACAGACT GGATCCCCTGAAGTCGCATAAACCTGAACCTCCTGTAGCAGGCCCAGGTCGTGGTGGCCGAGTTGGAACCCACGG GGGCACTCTCTCTTCTTATATTGTGAAGAACATTGCTTTGGACAAGACCGATGACAGTAATCCTCGGGAAGCCAT TTTGCGTCATGCCAAAGCAGCAGAAGACAGCCCATATTGGGTTTCTCCAGCATATTCCAAGACTCAGCCCAAAAC CATGTTTGCCCAAGTTGAATCTGATGATGAGGAAGCAAAGAATGAGCCAGAATGGAAAAAAACGTAAAATT<u>TGA</u>AG

PCT/US2003/028547

FIGURE 1576

MERSGPSEVTGSDASGPDPQLAVTMGFTGFGKKARTFDLEAMFEQTRRTAVERSRKTLEAREKEEEMNREKELRR QNEDIEPTSSRSNVVRDCSKSSSRDTSSSESEQSSDSSDDELIGPPLPPKMVGKPVNFMEEDILGPLPPPLNEEE EEAEEEEEEEEENPVHKIPDSHEITLKHGTKTVSALGLDPSGARLVTGGYDYDVKFWDFAGMDASFKAFRSLQ PCECHQIKSLQYSNTGDMILVVSGSSQAKVIDRDGFEVMECIKGDQYIVDMANTKGHTAMLHTGSWHPKIKGEFM TCSNDATVRTWEVENPKKQKSVFKPRTMQGKKVIPTTCTYSRDGNLIAAACQNGSIQIWDRNLTVHPKFHYKQAH DSGTDTSCVTFSYDGNVLASRGGDDSLKLWDIRQFNKPLFSASGLPTMFPMTDCCFSPDDKLIVTGTSIQRGCGS GKLVFFERRTFQRVYEIDITDASVVRCLWHPKLNQIMVGTGNGLAKVYYDPNKSQRGAKLCVVKTQRKAKQAETL TQDYIITPHALPMFREPRQRSTRKQLEKDRLDPLKSHKPEPPVAGPGRGGRVGTHGGTLSSYIVKNIALDKTDDS NPREAILRHAKAAEDSPYWVSPAYSKTQPKTMFAQVESDDEEAKNEPEWKKRKI

PCT/US2003/028547

1703/6881 FIGURE 1577

CGGGCTGTAGAGCCTTGCGCGCGCAGTGGGGATGGAACGTTGCTAGGCTTAGCGGGTCTGGCTGCTGGGGGCCCG AGCAGCACGCTCGGAGCCGCCGCGCCCAAAGCGGGAATCTGGGAGGCGAGCAGCTCTGCAGTTAATGCACGTAT TTTAAACTCCCGGGCCTGCGGACGCT<u>ATG</u>CACAGGAAGCACCTCCAGGAGATTCCAGACCTGAGTAGCAACGTTG CCACCAGCTTCACGTGGGGATGGGATTCCAGCAAGACTTCTGAACTGCTGTCAGGCATGGGGGTCTCCGCCCTGG AGAAAGAGGAGCCCGACAGTGAGAACATCCCCCAGGAACTGCTCTCAAACCTGGGCCACCCGGAGAGCCCCCCAC GGAAACGGCTGAAGAGCAAAGGGAGTGACAAAGACTTTGTGATTGTCCGCAGGCCTAAGCTAAATCGAGAGAACT TGCTAAAGGTCTCTGGTGTTTGTAAGAGGTGGTATCGCCTAGCGTCTGATGAGTCTCTATGGCAGACCTTAGACC TCACAGGTAAAAATCTGCACCCGGATGTGACTGGTCGGTTGCTGTCTCAAGGGGTGATTGCCTTCCGCTGCCCAC GATCATTTATGGACCAACCATTGGCTGAACATTTCAGCCCTTTTCGTGTACAGCACATGGACCTATCGAACTCAG TTATAGAAGTGTCCACCCTCCACGGCATACTGTCTCAGTGTTCCAAGTTGCAGAATCTAAGCCTGGAAGGCCTGC GGCTTTCGGATCCCATTGTCAATACTCTCGCAAAAAACTCAAATTTAGTGCGACTTAACCTTTCTGGGTGTTCTG GATTCTCTGAATTTGCCCTGCAGACTTTGCTAAGCAGCTGTTCCAGACTGGATGAGCTGAACCTCTCCTGGTGTT TTGATTTCACTGAAAAGCATGTACAGGTGGCTGTTGCGCATGTGTCAGAGACCATCACCCAGCTGAATCTTAGCG TAAGTGATAGTGTCATGCTAAAGAATGACTGCTTTCAGGAATTTTTCCAGCTCAACTACCTCCAACACCTATCAC TCAGTCGGTGCTATGATATAACCTGAAACTTTACTATTAGTGACAAGAGCTGGGGTTAGGATCCGGTTGGACT CTGACATCGGATGCCCTCAAACATACAGAACTTCCAAACTCAAGTCCAGCCATAAGCTATTTTGCCAACATGTCA GAGTAATCTGTATTTTTGTATGTGATTTCTACTTTTATAGACTTGTTTTAAAACAA<u>TAA</u>AACACATTTTTATAAA AATGAGTGCTTAAACTAAAAAAAAAAAAAAAAAAAAA

PCT/US2003/028547

1704/6881 FIGURE 1578

MHRKHLQEIPDLSSNVATSFTWGWDSSKTSELLSGMGVSALEKEEPDSENIPQELLSNLGHPESPPRKRLKSKGS DKDFVIVRRPKLNRENFPGVSWDSLPDELLLGIFSCLCLPELLKVSGVCKRWYRLASDESLWQTLDLTGKNLHPD VTGRLLSQGVIAFRCPRSFMDQPLAEHFSPFRVQHMDLSNSVIEVSTLHGILSQCSKLQNLSLEGLRLSDPIVNT LAKNSNLVRLNLSGCSGFSEFALQTLLSSCSRLDELNLSWCFDFTEKHVQVAVAHVSETITQLNLSGYRKNLQKS DLSTLVRRCPNLVHLDLSDSVMLKNDCFQEFFQLNYLQHLSLSRCYDIIPETLLLVTRAGVRIRLDSDIGCPQTY RTSKLKSSHKLFCQHVRVICIFVCDFYFYRLVLKQ

PCT/US2003/028547

1705/6881 FIGURE 1579

GGCCCGAGCACCACCTCGGAGCCGCCGCCGCCCAAAGCGGGAATCTGGGAGGCGAGCAGCTCTGCAGTTAATGC ${\tt ACGTATTTAAACTCCCGGGCCTGCGGACGCT} \underline{{\tt ATG}} {\tt CACAGGAAGCACCTCCAGGAGATTCCAGACCTGAGTAGCA}$ ACGTTGCCACCAGCTTCACGTGGGGATGGGATTCCAGCAAGACTTCTGAACTGCTGTCAGGCATGGGGGTCTCCG CCCTGGAGAAAGAGGAGCCCGACAGTGAGAACATCCCCCAGGAACTGCTCTCAAACCTGGGCCACCCGGAGAGCC CCCCACGGAAACGGCTGAAGAGCAAAGGGAGTGACAAAGACTTTGTGATTGTCCGCAGGCCTAAGCTAAATCGAG CTGAGCTGCTAAAGGTCTCTGGTGTTTGTAAGAGGTGGTATCGCCTAGCGTCTGATGAGTCTCTATGGCAGACCT TAGACCTCACAGGTAAAAATCTGCACCCGGATGTGACTGGTCGGTTGCTGTCTCAAGGGGTGATTGCCTTCCGCT GCCCACGATCATTTATGGACCAACCATTGGCTGAACATTTCAGCCCTTTTCGTGTACAGCACATGGACCTATCGA ACTCAGTTATAGAAGTGTCCACCCTCCACGGCATACTGTCTCAGTGTTCCAAGTTGCAGAATCTAAGCCTGGAAG GCCTGCGGCTTTCGGATCCCATTGTCAATACTCTCGCAAAAAACTCAAATTTAGTGCGACTTAACCTTTCTGGGT GTTCTGGATTCTCTGAATTTGCCCTGCAGACTTTGCTAAGCAGCTGTTCCAGACTGGATGAGCTGAACCTCTCCT GGTGTTTTGATTTCACTGAAAAGCATGTACAGGTGGCTGTTGCGCATGTGTCAGAGACCATCACCCAGCTGAATC TAGACTTAAGTGATAGTGTCATGCTAAAGAATGACTGCTTTCAGGAATTTTTCCAGCTCAACTACCTCCAACACC TATCACTCAGTCGGTGCTATGATATAATACCTGAAACTTTACTTGAACTTGGAGAAATTCCCACACTAAAAACAC TACAAGTTTTTGGAATCGTGCCAGATGGTACCCTTCAACTGTTAAAGGAAGCCCTTCCTCATCTACAGATTAATT GCTCCCATTTCACCACCATTGCCAGGCCAACTATTGGCAACAAAAAGAACCAGGAGATATGGGGCATCAAATGCC ${\tt GACTGACACTGCAAAAGCCCAGTTGTCTA} {\tt TGA} {\tt AGTATTTATTGCAGGATGGTGTCTCTTTAGAACAGGGAAA}$ ATAGGCAGGAAGCCCAATTGCTGGAGTACTTAGCTAGTTTTATTCTTGGTTTTCCCTTTGCCTTCATTCTGCAAG TATACTAGGGAGCCATTTGAGAGGG

PCT/US2003/028547

1706/6881 FIGURE 1580

MHRKHLQEIPDLSSNVATSFTWGWDSSKTSELLSGMGVSALEKEEPDSENIPQELLSNLGHPESPPRKRLKSKGS
DKDFVIVRRPKLNRENFPGVSWDSLPDELLLGIFSCLCLPELLKVSGVCKRWYRLASDESLWQTLDLTGKNLHPD
VTGRLLSQGVIAFRCPRSFMDQPLAEHFSPFRVQHMDLSNSVIEVSTLHGILSQCSKLQNLSLEGLRLSDPIVNT
LAKNSNLVRLNLSGCSGFSEFALQTLLSSCSRLDELNLSWCFDFTEKHVQVAVAHVSETITQLNLSGYRKNLQKS
DLSTLVRRCPNLVHLDLSDSVMLKNDCFQEFFQLNYLQHLSLSRCYDIIPETLLELGEIPTLKTLQVFGIVPDGT
LQLLKEALPHLQINCSHFTTIARPTIGNKKNQEIWGIKCRLTLQKPSCL

PCT/US2003/028547

1707/6881 FIGURE 1581A

ATTCTTCTAAGGAGCCTAAATTCACCAAGTGCCGTTCACCTGAGCGAGAGACTTTTTCATGCCACTGGACAGATG AGGTTCATCATGGTACAAAGAACCTAGGACCCATACAGCTGTTCTATACCAGAAGGAACACTCAAGAATGGACTC AAGAATGGAAAGAATGCCCTGATTATGTTTCTGCTGGGGAAAACAGCTGTTACTTTAATTCATCGTTTACCTCCA TCTGGATACCTTATTGTATCAAGCTAACTAGCAATGGTGGTACAGTGGATGAAAAGTGTTTCTCTGTTGATGAAA TAGTGCAACCAGATCCACCCATTGCCCTCAACTGGACTTTACTGAACGTCAGTTTAACTGGGATTCATGCAGATA ACAAAGAAGTAAATGAAACTAAATGGAAAATGATGGACCCTATATTGACAACATCAGTTCCAGTGTACTCATTGA AAGTGGATAAGGAATATGAAGTGCGTGTGAGATCCAAACAACGAAACTCTGGAAATTATGGCGAGTTCAGTGAGG TGCTCTATGTAACACTTCCTCAGATGAGCCAATTTACATGTGAAGAAGATTTCTACTTTCCATGGCTCTTAATTA TTATCTTTGGAATATTTGGGCTAACAGTGATGCTATTTGTATTCTTATTTTCTAAACAGCAAAGGATTAAAATGC TGATTCTGCCCCCAGTTCCAGTTCCAAAGATTAAAGGAATCGATCCAGGATCTCCTCAAGGAAAAATTAGAGG AGGTGAACACAATCTTAGCCATTCATGATAGCTATAAACCCGAATTCCACAGTGATGACTCTTGGGTTGAATTTA AGAAATCACATAGTAACCTAGGGGTGAAGGATGGCGACTCTGGACGTACCAGCTGTTGTGAACCTGACATTCTGG AGACTGATTTCAATGCCAATGACATACATGAGGGTACCTCAGAGGTTGCTCAGCCACAGAGGTTAAAAGGGGAAG CAGATCTCTTATGCCTTGACCAGAAGAATCAAAATAACTCACCTTATCATGATGCTTGCCCTGCTACTCAGCAGC CCAGTGTTATCCAAGCAGAAAAAAAAAACAAACCACACTTCCTACTGAAGGAGCTGAGTCAACTCACCAAGCTG CCCATATTCAGCTAAGCAATCCAAGTTCACTGTCAAACATCGACTTTTATGCCCAGGTGAGCGACATTACACCAG CAGGTAGTGTGGTCCTTTCCCCGGGCCAAAAGAATAAGGCAGGGATGTCCCAATGTGACATGCACCCGGAAATGG TCTCACTCTGCCAAGAAAACTTCCTTATGGACAATGCCTACTTCTGTGAGGCAGATGCCAAAAAGTGCCTCCCTG TGGCTCCTCACATCAAGGTTGAATCACACATACAGCCAAGCTTAAACCAAGAGGACATTTACATCACCACAGAAA GCCTTACCACTGCTGCTGGGAGGCCTGGGACAGGAGAACATGTTCCAGGTTCTGAGATGCCTGTCCCAGACTATA CCTCCATTCATATAGTACAGTCCCCACAGGGCCTCATACTCAATGCGACTGCCTTGCCCTTGCCTGACAAAGAGT GAGCTACGTATTTAATAGCAAAGAATTGACTGGGGCAATAACGTTTAAGCCAAAACAATGTTTAAACCTTTTTTG GAAGAATGCTTAATCAGATAGATATTCCTATTGTGCAATGTAAATATTTTAAAGAATTGTGTCAGACTGTTTAGT AGCAGTGATTGTCTTAATATTGTGGGTGTTAATTTTTGATACTAAGCATTGAATGACTATGTTTTTAATGTATAG TAAATCACGCTTTTTGAAAAAGCGAAAAAATCAGGTGGCTTTTGCGGTTCAGGAAAATTGAATGCAAACCATAGC TTTTAATAATTTAGACTTCAAGCATGGCTATTTTATATTACACTACACACTGTGTACTGCAGTTGGTATGACCCC TTTTTTACAAAGCCCTTTTATACCTCCCCAGACTCCTTCAACAATTCTAAAATGATTGTAGTAATCTGCATTATT GGAATATAATTGTTTTATCTGAATTTTTAAACAAGTATTTGTTAATTTAGAAAACTTTAAAGCGTTTGCACAGAT CAACTTACCAGGCACCAAAAGAAGTAAAAGCAAAAAAGAAAACCTTTCTTCACCAAATCTTGGTTGATGCCAAAA AAAAATACATGCTAAGAGAAGTAGAAATCATAGCTGGTTCACACTGACCAAGATACTTAAGTGCTGCAATTGCAC GCGGAGTGAGTTTTTTAGTGCGTGCAGATGGTGAGAGATAAGATCTATAGCCTCTGCAGCGGAATCTGTTCACAC CCAACTTGGTTTTGCTACATAATTATCCAGGAAGGGAATAAGGTACAAGAAGCATTTTGTAAGTTGAAGCAAATC GAATGAAATTAACTGGGTAATGAAACAAAGAGTTCAAGAAATAAGTTTTTGTTTCACAGCCTATAACCAGACACA TACTCATTTTTCATGATAATGAACAGAACATAGACAGAAGAAACAAGGTTTTCAGTCCCCACAGATAACTGAAAA TTATTTAAACCGCTAAAAGAAACTTTCTTCTCACTAAATCTTTTATAGGATTTATTAAAATAGCAAAAGAAGA CAGAGTCTCGCTCTGTCGCCAGGCTAGAGTGCAGTGGCGCGATCTTGACTCACTGCAATCTCCACCTCCCACAGG TTTGTATTTTAGCAGAGACGGGGTTTCACCATGTTGGCCAGGATGGTCTCGATCTCCTGACCTCGTGATCCACCC GACTCGGCCTCCCAAAGTGCTGGGATTACAGGTGTAAGCCACCGTGCCCAGCCCTAAACATCATTCTTGAGAGCA

PCT/US2003/028547

1708/6881 FIGURE 1581B

PCT/US2003/028547

1709/6881 FIGURE 1582

 ${\tt CCTTCACAGCTCTTTCACC} \underline{{\tt ATG}} {\tt CCTGGATCACTTCCTTTGAATGCAGAAGCTTGCTGGCCAAAAGATGTTGGG}$ ATTGTTGCCCTTGAGATCTATTTTCCTTCTCAATATGTTGATCAAGCAGAGTTGGAAAAATATGATGGTGTAGAT GCTGGGAAGTATACCATTGGCTTGGGCCAGGCCAAGATGGGCTTCTGCACAGATAGAGAAGATATTAACTCTCTT TGCATGACTGTGGTTCAGAATCTTATGGAGAGAAATAACCTTTCCTATGATTGCATTGGGCGGCTGGAAGTTGGA ACAGAGACAATCATCGACAAATCAAAGTCTGTGAAGACTAATTTGATGCAGCTGTTTGAAGAGTCTGGGAATACA GATATAGAAGGAATCGACAACTAATGCATGCTATGGAGGCACAGCTGCTGTCTTCAATGCTGTTAACTGGATT GAGTCCAGCTCTTGGGATGGACGGTATGCCCTGGTAGTTGCAGGAGATATTGCTGTATATGCCACAGGAAATGCT AGACCTACAGGTGGAGTTGGAGCAGTAGCTCTGCTAATTGGGCCAAATGCTCCTTTAATTTTTGAACGAGGGCTT CGTGGGACACATATGCAACATGCCTATGATTTTTACAAGCCTGATATGCTATCTGAATATCCTATAGTAGATGGG AAACTCTCCATACAGTGCTACCTCAGTGCATTAGACCGCTGCTATTCTGTCTACTGCAAAAAAGATCCATGCCCAG AAACTGGTTCAGAAATCTCTAGCTCGGATGTTGCTGAATGACTTCCTTAATGACCAGAATAGAGATAAAAATAGT ATCTATAGTGGCCTGGAAGCCTTTGGGGATGTTAAATTAGAAGACACCTACTTTGATAGAGATGTGGAGAAGGCA TTTATGAAGGCTAGCTCTGAACTCTTCAGTCAGAAAACAAAGGCATCTTTACTTGTATCAAAATCAAAATGGAAAT ATGTACACATCTTCAGTATATGGTTCCCTTGCATCTGTTCTAGCACAGTACTCACCTCAGCAATTAGCAGGGAAG AGAATTGGAGTGTTTTCTTATGGTTCTGGTTTGGCTGCCACTCTGTACTCTCTTAAAGTCACACAAGATGCTACA CCGGGGTCTGCTCTTGATAAAATAACAGCAAGTTTATGTGATCTTAAATCAAGGCTTGATTCAAGAACTGGTGTG GCACCAGATGTCTTCGCTGAAAACATGAAGCTCAGAGAGGACACCCATCATTTGGTCAACTATATTCCCCAGGGT CGTCCCACTCCAAATGATGACACTTTGGATGAAGGAGTAGGACTTGTGCATTCAAACATAGCAACTGAGCATATT CCAAGCCCTGCCAAGAAGTACCAAGACTCCCTGCCACAGCAGCAGAACCTGAAGCAGCTGTCATTAGTAATGGG WO 2004/030615 PCT/US2003/028547

FIGURE 1583

MPGSLPLNAEACWPKDVGIVALEIYFPSQYVDQAELEKYDGVDAGKYTIGLGQAKMGFCTDREDINSLCMTVVQN LMERNNLSYDCIGRLEVGTETIIDKSKSVKTNLMQLFEESGNTDIEGIDTTNACYGGTAAVFNAVNWIESSSWDG RYALVVAGDIAVYATGNARPTGGVGAVALLIGPNAPLIFERGLRGTHMQHAYDFYKPDMLSEYPIVDGKLSIQCY LSALDRCYSVYCKKIHAQWQKEGNDKDFTLNDFGFMIFHSPYCKLVQKSLARMLLNDFLNDQNRDKNSIYSGLEA FGDVKLEDTYFDRDVEKAFMKASSELFSQKTKASLLVSNQNGNMYTSSVYGSLASVLAQYSPQQLAGKRIGVFSY GSGLAATLYSLKVTQDATPGSALDKITASLCDLKSRLDSRTGVAPDVFAENMKLREDTHHLVNYIPQGSIDSLFE GTWYLVRVDEKHRRTYARRPTPNDDTLDEGVGLVHSNIATEHIPSPAKKVPRLPATAAEPEAAVISNGEH

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PCT/US2003/028547

1711/6881 FIGURE 1584

CAATGGGTTTGCCACCAGAACACAGGTGTTGTGAAAACTACCCCTAAAAGCCCAAAATGGGAAAGGAAAAGACTCA TATCAACATTGTCGTCATTGGACACGTAAATTCGGGCAAGTCCACCACTACTGGCCATCTGACCTACAAATGTGG TGGCATCGACAAAAGAACCATTGAAAAATTTGAGAAGGAGGCTGCTGAGATGGGAAAGGACTCCTTCAAGTATGC $\tt CTGGGTCTTGCATAAACTGAAAGCTGAGCGTGAACGTGGTATCACCATTGATATCTCCTTGTGGAAATTTGAGAC$ CAGCAAGTACTATGTGACTATCATTGATGCCCCAGGACTCAGAGACTTCATCAAAAACATGATTACAGGGACATC TCAGGCTGTGCTGTCCTGATGGTTGCTGCTGGTGTTGGCGAATTTGAAACTGGTATCTCCAAGAATGGGCAGACC TGAGAGCATGCCCTTCTGGCTTACACACTGGGTGTGAAACAACTAATTGTTGGTGTTAACAAAATGGATTCCACT GAGCCACCCTACAGCCAGAAGAGAGAAGAGGAAATTGTTAAGGAAGTCAGCACTTACATTAAGAAAATTGGTTAC AACCCTGACACAGTAGCATTTGTGCCAATTTCTGGTTGGAATGGTGACAACATGCTGGAGCCGAGTGCTAACATG CCTTGGCTCAAGGGATGGAAAGCCACCCGTAAGGATGGCAGTGCCAGCGGCACCATGCTGCTTGAGGCTCTGGAC ATTGGTACTGTTCCTGTTGGCCGAGTGGAGACTGGTGTTCTCAAACCTGGTGTGGTGGTCACCTTTGCTCCAGTC AACATTACAACAGAAGTAAAATCTGTCGAAATGCACCATGAAGCTTTGAGTGAAGCTCTTCCTGGGGACAATGTG GGCTTCAATGTCAAGAATGTGTCTGTCAAGGATGTTCGTCGTGGCAACGTTGCTGGTGACAGCAAAAATGACCCA CCAATGGAAACAGCTGACTTCATTGCTCAGGTAATTATCCTGAACCATCCAGGCCAAATAAGCGCTGGCTATGCC CCTATATTGGATTGCCACGCGGCTCACATTGCATGCAAGTTTGCTGAGCTGAAGGAAAAGATTGATCGCGGTTCT GGTAAAAAGCTGGAAGATGGCCCTAAATTCTTGAAGTCTGGTGATGCTGCCATTGTTGATATGGTTCCTGGCAAG GTGGGTGTCATCAAAGCAGTGGACAAGAAGGCTGCTGGAGGTGGCAAGGTCACGAAGTCTGCCCAGACAGCTCAG AAGGCTAAATGAATATTATCCCTAATACCTGCCACCCAACTCT<u>TAA</u>TCAGTGGTGGAAGAATGGTCTCAGAACTG TTTGTTTCAATTGGCCATTTAAGTTTAGTAGTGAAAGACTGGTTAATGATAACAATGCATCGTAAAACCTTCAGA AGGAAAGGAGAATGTTTTGTGGACCACTTTGGTTTTCTTTTTTGCATGTGGTAGTTTTAAGTTATTAGTTTTTAA AATCAGTACTTTTTAATGGAAACAACTTGACCAAAAATTTGTCACAGAATTTTGAGACC

PCT/US2003/028547

FIGURE 1585

MDSTEPPYSQKREEEIVKEVSTYIKKIGYNPDTVAFVPISGWNGDNMLEPSANMPWLKGWKATRKDGSASGTMLL EALDCILPPTHPTDKPLRLPLQDVYKIGGIGTVPVGRVETGVLKPGVVVTFAPVNITTEVKSVEMHHEALSEALP GDNVGFNVKNVSVKDVRRGNVAGDSKNDPPMETADFIAQVIILNHPGQISAGYAPILDCHAAHIACKFAELKEKI DRGSGKKLEDGPKFLKSGDAAIVDMVPGKPIVESFSDYPPLGHFAVRDMRQTVAVGVIKAVDKKAAGGGKVTKSA QTAQKAK

PCT/US2003/028547

FIGURE 1586

PCT/US2003/028547

FIGURE 1587

PCT/US2003/028547

1715/6881 FIGURE 1588A

ATGTGGCAATCCGTCTGGGATGTGAAAAGCGTGGAGCGCATTTAGAGGAATTCGACGAAAACACAGGAAATCACT $\verb|CCTCTCCCGCTCCTGGGCGCCGCTGCCACTGGGGCAGAGGACTGGGAACCGCGGGAGAGGGGATAAGTGGCCCAGC| \\$ CAGAGAGCGCAGCTCCCGCGCCCGGTCCTGCCGAACCAGCGCGCCCCCTGGCGCTGAGGCTGCTCCGGCC TGCGTATCATTCAATGTTGATGTGAAAAATTCAATGACTTTCAGCGGCCCGGTGGAAGACATGTTTGGATATACT GTTCAACAATATGAAAATGAAGAAGGAAAATGGGTGCTTATTGGTTCTCCGTTAGTTGGCCAACCCAAAAACAGA ACTGGAGATGTCTATAAGTGTCCAGTTGGGAGAGGTGAATCATTACCTTGTGTAAAGTTGGATCTACCAGTTAAT ACATCAATTCCCAATGTCACAGAAGTAAAGGAGAACATGACATTTGGATCAACTTTAGTCACCAAACCCAAATGGA GGATTTCTGGCTTGTGGGCCCTTATATGCCTATAGATGTGGACATTTGCATTACACAACTGGAATCTGTTCTGAC GTCAGCCCCACATTTCAAGTCGTGAATTCCATTGCCCCTGTACAAGAATGCAGCACTCAACTGGACATAGTCATA GTGCTGGATGGTTCCAACAGTATTTACCCATGGGACAGTGTTACAGCTTTTTTAAATGACCTTCTTGAAAGAATG GATATTGGTCCTAAACAGACACAGGTTGGAATTGTACAGTATGGAGAAAACGTGACCCATGAGTTCAACCTCAAT AAGTATTCTTCCACCGAAGAGGTACTTGTTGCAGCAAAGAAAATAGTCCAGAGAGGTGGCCGCCAGACTATGACA GCTCTTGGAATAGACACAGCAAGAAAGGAGGCATTCACGGAAGCCCGGGGTGCCCGAAGAGGAGTTAAAAAAGTC ATGGTTATTGTGACAGATGGAGAGTCTCATGACAATCATCGACTGAAGAAGGTCATCCAAGACTGTGAAGATGAA AACATTCAACGGTTTTCCATAGCTATTCTTGGCAGCTATAACCGAGGAAATTTAAGCACTGAAAAATTTGTGGAG GAAATAAAATCAATTGCAAGTGAACCCACTGAAAAGCATTTCTTCAATGTCTCTGATGAATTGGCTCTAGTCACC ATTGTTAAAACTCTGGGAGAAAGAATATTTGCCCTGGAAGCCACAGCTGACCAGTCAGCAGCTTCATTTGAAATG GAAATGTCTCAGACTGGCTTCAGTGCTCATTATTCACAGGACTGGGTCATGCTTGGAGCAGTAGGAGCCTATGAT TGGAATGGAACAGTTGTCATGCAGAAGGCTAGTCAAATCATAATCCCTCGAAACACAACCTTTAATGTTGAGTCT ACCAAAAAGAATGAACCGCTTGCTTCTTATTTAGGTTACACTGTAAACTCTGCTACTGCTTCTTCTGGAGATGTG CTCTATATTGCTGGACAGCCTCGGTACAATCATACAGGCCAGGTCATTATCTACAGGATGGAAGATGGAAACATC AAAATTCTCCAGACGCTCAGTGGAGAACAGATTGGTTCCTACTTTGGCAGTATTTTAACAACAACTGACATTGAC AAGGATTCTAATACTGACATTCTTCTAGTCGGAGCCCCTATGTACATGGGAACAGAAAGGAGGAGCAAGGAAAA GTGTATGTGTATGCTCTCAATCAGACAAGGTTTGAATATCAAATGAGCCTGGAACCTATTAAGCAGACGTGCTGT TCATCTCGGCAGCACAATTCATGCACAACAGAAAAACAAAAATGAGCCATGCGGGGCTCGTTTTGGAACTGCAATT GCTGCTGTAAAAGACCTCAATCTTGATGGATTTAATGACATCGTGATAGGAGCTCCGCTGGAAGATGATCACGGG GGAGCTGTGTACATTTATCATGGAAGTGGCAAGACTATAAGGAAAGAGTATGCACAACGTATTCCATCAGGTGGG GATGGTAAGACACTGAAATTTTTTGGCCAGTCTATCCACGGAGAAATGGATTTAAATGGTGACGGTCTGACAGAT GTGACTATTGGGGGCCTTGGTGCTGCCCCTCTTCTGGTCCCGAGATGTGGCCGTAGTTAAAGTGACCATGAAT TTTGAGCCAAATAAAGTGAATATTCAAAAGAAAAACTGCCATATGGAGGGAAAGGAAACAGTATGCATAAATGCT ACAGTGTGTTTTGATGTGAAATTAAAGTCTAAAGAAGACACGATTTATGAAGCTGATTTGCAGTACCGTGTCACC CTAGATTCACTAAGACAAATATCACGAAGTTTTTTCTCTGGAACTCAAGAGAAAGGTTCAAAGGAACATCACA GTTCGAAAATCAGAATGCACTAAGCACTCCTTCTACATGTTGACAAGCATGACTTTCAGGACTCTG<u>TGA</u>GAATAA CGTTGGACTTTAATCTTACCGATCCAGAAAATGGGCCTGTTCTTGATGATTCTCTACCAAACTCAGTACATGAAT ATATTCCCTTTGCCAAAGATTGTGGAAATAAGGAAAAATGTATCTCAGACCTCAGCCTGCATGTCGCCACCACTG AAAAGGACCTGCTGATTGTCCGATCCCAGAATGATAAGTTCAACGTTAGCCTCACAGTCAAAAATACAAAGGACA GTGCCTATAACACCAGGACAATAGTGCATTATTCTCCAAATCTAGTTTTTTCAGGAATTGAGGCTATCCAAAAAG GCGAAGAACCTCCTGAAACCCTTTCTGATAATGTAGTAAACATTTCTATCCCGGTAAAATATGAAGTTGGACTAC AGTTTTACAGCTCTGCAAGTGAATACCACATTTCAATTGCTGCCAATGAGACAGTCCCTGAAGTTATTAATTCTA CTGAGGACATTGGAAATGAAATTAATATCTTCTACTTGATTAGAAAAAGTGGATCTTTTCCAATGCCAGAGCTTA AGCTGTCAATTTCATTCCCCAATATGACATCAAATGGTTACCCTGTGCTGTACCCAACTGGATTGTCATCTTCTG CTGACCATCTCAAACGAGGCACAATTCTGGACTGCAATACATGTAAATTTGCTACCATCACATGTAATCTCACTT CTTCTGACATCAGCCAAGTCAATGTTTCGCTTATCTTGTGGAAACCAACTTTTATAAAATCATATTTTTCCAGCT

PCT/US2003/028547

1716/6881 FIGURE 1588B

TAAATCTTACTATAAGGGGAGAACTTCGGAGTGAAAATGCATCTCTGGTTTTAAGTAGCAGCAATCAAAAAAAGAG AGCTTGCTATTCAAATATCCAAAGATGGGCTACCGGGCAGAGTGCCATTATGGGTCATCCTGCTGAGTGCTTTTG CCGGATTGTTGCTGTTAATGCTGCTCATTTTAGCACTGTGGAAGATTGGATTCTTCAAAAGACCACTGAAAAAGA AAATGGAGAAATGAAATATTTTATGAAAGAAAATAATAACAATTATTCAATAATCTATCCTCAGGTTTGCCTCAA ATATGTGACAAGAATGTATAATTCATGACATAGTCATGTAACTATGTAATCCATCAGGGATTCATTACTTGGAA AATGACAGGTCATGCATTATCCAAAAACAATACCAAAAAGACATATTTTATAAAATGACAAAAAATATTTTACAT AATTACTCATTTTTGTTGAGTAAGCAAAATTACAAAGTGTTTTTAAAAAAACCTGTACAAATATGTTTATGTATT AAATCACCATCCAAAATATTTAAGGAATATATAAAAAGATTTTTATGATCATAGAAACATCTATTTTCAAAACAA TATAAATTAAGCTTTTCCCCTTGATTCCTGTTGGATATCCATGTTCAGCATGACAGTCAGCACTCGTAAATGCCA AGAAAAGAATTACCTGAAAAAGATCATTTCTCCCTATTCAAATGAGAATATTTTCCCTTGGTAGAATCCATATAC AATATGGATTGAAAATTAAGTCACCAAGAATACATTTAGCATCTTTGTGTTGGGTTCTATACCTAAAAATTTTCC CTCCCTGCCCAAGGTGATTGGAAAGTACTGCAATTGAGCTAAAATTTTATCTAGGATGGAAAATCAGGATAGACT CGTTTAAAAACAAGTATATTAAATGGGTTAAATTAAGCTTTTACAGAACATGCTTAATTTTGATATTGAGCTCTA AATGCAAAACTCTTTTATACTGAAAAAACACTTAAAGTAGTTTTTGTGTGGCATCACAGTGATTTGTCATGAAAAG CCATATATGGGGGACATGCTAAAATGGCTTCTGAATGAAATACGACAGCAGAGAAAGATGCCACTGAAATGCTGA CCAACCACACTTCTTATTTTTTTGAAAAGACAATTTTCCATTTCAGTATTACATTTTACCAAGAAGTCACTGCTT TTTAGGTGTGTTGCATCAATATTTAAATAAAATCCCAGAAATGTATTTTAAAGAATTTCAGGTTTGAAAACTCAA ACCAACAGGAAGATATCACACCTTTGTATGTGCTTCTTTGTTCTTGAAGTAGTCATTATGGTTCATTGGAATCTA GAACTACTGCTGTAAAGTTTGCTGACATTTCTGCAACAACATTTCTCCATCTGATTTACCAGAACCTGTAACAAG ACCAGAACATGTATTCATCCAGAAACTCCTGGGCTCTGCTTTGTTCAAAGAGGGGCAAATCCACATAGAAATTAA ATGTTATAAATTTATTTTTTAAACTAATTTCCAAAGAATTTAGCTGAAGACTCAGAGTCAGCCTACCTCTTGAC TCTCCACATCCGCATCTAAGATCCTGAAGGCCAAAGGAATGCGCCTGTGGGATGCCAAAGCCATCAGTAGCTGGA AGAAAGAATACCTCTTTCTAGAGGTTTGGTGTCCTCTTGCTGGCCTGTCATTATTTGGAAATACGCGCTTTTGGA AGGGTTTCTCTTATTCAGAGTTACCATGTTGCACACCCCCAGTGCTCAGCCTGCCCAGAAGCCCTTCTCTGATCT CAGCAAGATCTTAGTAGTAAAGCTAACGGATCCATTGAAATTCATACTCAGCATCTGTGACTACTAGACAAAGCC CATTTACTGAACCATAAGTGTGCACTTTTAAACTAAATTGTTAACTGAAAGGGAAAAAATAGAAATGAGGGCATT TTGAAGTTTTTAGAAAAGAGAGGAAGAGCTGTTGGCCAGATCAAAGAGATACTTATAAGCCCGGCACAATTTTTA ACATAAGTCATTCCTGGCTATTAAGTAAAATATTTCATGAACCAGAAGTCCTGTTTCTCTAATATTATAATTTGT TGAGGTTTGTGTGTGTGTGTGTGCATGTGCAGACACATGTACACATATAAATTGAATACAAAAATAGCTCTAT AACACCAAAAAACAGAGTTTACAGAAAATAAACACAAAAGCTATATCTGCAAGACAAGTTTGATTCATCTAGTTT CATATAGTTTCATATAGTTTCATTTTATTAATATTTAGGTTTAACTTATAGTTCTGCAATTATTTAAAAAAACAA GTACAGAGCGTTTGATTAAAAAAAGTCAACAAATGTTTCAAAACAGCTTTGTACAAATGTTATAAAACATATTTA ATGATTAAGAAATGTACTAGACTCTATCATTTACTTTAAAACATTTAATTAGAAAAACAGGTGATATTTAAGAC TATTTATAAACTTATTGGCCAAAATTGCCAAAAA

WO 2004/030615 PCT/US2003/028547

FIGURE 1589

MAPRPRARPGVAVACCWLLTVVLRCCVSFNVDVKNSMTFSGPVEDMFGYTVQQYENEEGKWVLIGSPLVGQPKNR
TGDVYKCPVGRGESLPCVKLDLPVNTSIPNVTEVKENMTFGSTLVTNPNGGFLACGPLYAYRCGHLHYTTGICSD
VSPTFQVVNSIAPVQECSTQLDIVIVLDGSNSIYPWDSVTAFLNDLLERMDIGPKQTQVGIVQYGENVTHEFNLN
KYSSTEEVLVAAKKIVQRGGRQTMTALGIDTARKEAFTEARGARRGVKKVMVIVTDGESHDNHRLKKVIQDCEDE
NIQRFSIAILGSYNRGNLSTEKFVEEIKSIASEPTEKHFFNVSDELALVTIVKTLGERIFALEATADQSAASFEM
EMSQTGFSAHYSQDWVMLGAVGAYDWNGTVVMQKASQIIIPRNTTFNVESTKKNEPLASYLGYTVNSATASSGDV
LYIAGQPRYNHTGQVIIYRMEDGNIKILQTLSGEQIGSYFGSILTTTDIDKDSNTDILLVGAPMYMGTEKEEQGK
VYVYALNQTRFEYQMSLEPIKQTCCSSRQHNSCTTENKNEPCGARFGTAIAAVKDLNLDGFNDIVIGAPLEDDHG
GAVYIYHGSGKTIRKEYAQRIPSGGDGKTLKFFGQSIHGEMDLNGDGLTDVTIGGLGGAALFWSRDVAVVKVTMN
FEPNKVNIQKKNCHMEGKETVCINATVCFDVKLKSKEDTIYEADLQYRVTLDSLRQISRSFFSGTQERKVQRNIT
VRKSECTKHSFYMLTSMTFRTL

PCT/US2003/028547

FIGURE 1590

GAAACCGGGCCCCCCCTCCTGGCCTGCATTCCCATCCCCTCTCCCGGGGCGGAGGTGAGGACCTCCTTGGT TCCTTTGGTTCTGTCAGTGAGCCCCTTCCTTGGCCATGAAGCTCGTGAGGAAGAACATCGAGAAGGACAATGCGG GCCAGGTGACCCTGGTCCCCGAGGAGCCTGAGGACATGTGGCACACTTACAACCTCGTGCAGGTGGGCGACAGCC TGCGCGCCTCCACCATCCGCAAGGTACAGACAGAGTCCTCCACGGGCAGCGTGGGCAGCAACCGGGTCCGCACTA ${\tt CCCTCACTCTGCGTGGAGGCCATCGACTTCGACTCTCAAGCCTGCCAGCTGCGGGTTAAGGGGACCAACATCC}$ AAGAGAATGAGTATGTCAAGATGGGGGCTTACCACACCATCGAGCTGGAGCCCAACCGCCAGTTCACCCTGGCCA AGAAGCAGTGGGATAGTGTGGTACTGGAGCGCATCGAGCAGGCCTGTGACCCAGCCTGGAGCGCTGATGTGGCGG CTGTGGTCATGCAGGAAGGCCTCGCCCATATCTGCTTAGTCACTCCCAGCATGACCCTCACTCGGGCCAAGGTGG AGGTGAACATCCCTAGGAAAAGGAAAGGCAATTGCTCTCAGCATGACCGGGCCTTGGAGCGGTTCTATGAACAGG TGGTCCAGGCTATCCAGCGCCACATACACTTTGATGTTGTAAAGTGCATCCTGGTGGCCAGCCCAGGATTTGTGA GGGAGCAGTTCTGCGACTACCTGTTTCAACAAGCAGTGAAGACCGACAACAAACTGCTCCTGGAAAACCGGTCCA AATTTCTTCAGGTACATGCCTCCTGGGACACAAGTACTCCCTGAAAGAGGCCCTTTGTGACCCTACTGTGGCTA GCCGCCTTTCAGACACTAAAGCTGCTGGGGAAGTCAAAGCCTTGGATGACTTCTATAAAATGTTACAGCATGAAC CGGATCGAGCTTTCTATGGACTCAAGCAGGTGGAGAAGGCCAATGAAGCCATGGCAATTGACACATTGCTCATCA GCGATGAGCTCTTCAGGCATCAGGATGTAGCCACACGGAGCCGGTATGTGAGGCTGGTGGACAGTGTGAAAGAGA ATGCAGGCACCGTTAGGATATTCTCTAGTCTTCACGTTTCTGGGGAACAGCTCAGCCAGTTGACTGGGGTAGCTG CCATTCTCCGCTTCCCTGTTCCCGAACTTTCTGACCAAGAGGGTGATTCCAGTTCTGAAGAGGATTAATGATTGA AACTTAAAATTGAGACAATCTTGTGTTTCCTAAACTGTTACAGTACATTTCTCAGCATCCTTGTGACAGAAAGCT GCAAGAATGGCACTTTTTGATTCATACAGGGATTTCTTATGTCTTTGGCTACACTAGATATTTTGTGATTGGCAA GACATGTATTTAAACAATAAACTA

PCT/US2003/028547

1719/6881 FIGURE 1591

 WO 2004/030615 PCT/US2003/028547

FIGURE 1592

CCGTGGGGCGGGCATAGGCCGTGACGTGATGTCGCGTATCGAGTCTCCGCCCCCTTCCCGCCTCCCCGTATATA AGACTTCGCCGAGCGCTCTCACTCGCACAAGTGGACCGGGGTGTTGGGTGCTAGTCGGCACCAGAGGCAAGGGTG CGAGGACCACGGCCGGCTCGGACGTGTGACCGCGCCTAGGGGGTGGCAGCGGGCAGTGCGGGGCGGCAAGGCGAC CATGGAGCTTTTGCGGACTATCACCTACCAGCCAGCCGCCAGCACCAAAATGTGCGAGCAGGCGCTGGGCAAGGG TTGCGGAGCGGACTCGAAGAAGAAGCGGCCGCCGCAGCCCCCGAGGAATCGCAGCCACCTCAGTCCCAGGCGCA AGTGCCCCGGCGCCCCTCACCACCATCACCACCATTCGCACTCGGGGCCGGAGATCTCGCGGATTATCGTCGA CCCCACGACTGGGAAGCGCTACTGCCGGGGCAAAGTGCTGGGAAAGGGTGGCTTTGCAAAATGTTACGAGATGAC AGATTTGACAAATAACAAAGTCTACGCCGCAAAAATTATTCCTCACAGCAGAGTAGCTAAACCTCATCAAAGGGA AAAGATTGACAAAGAAATAGAGCTTCACAGAATTCTTCATCATAAGCATGTAGTGCAGTTTTACCACTACTTCGA GGACAAAGAAACATTTACATTCTCTTGGAATACTGCAGTAGAAGGTCAATGGCTCATATTTTGAAAGCAAGAAA GGTGTTGACAGAGCCAGAAGTTCGATACTACCTCAGGCAGATTGTGTCTGGACTGAAATACCTTCATGAACAAGA **AATCTTGCACAGAGATCTCAAACTAGGGAACTTTTTTATTAATGAAGCCATGGAACTAAAAGTTGGGGACTTCGG** AGTCCTCAACAAACAAGGACATGGCTGTGAATCAGACATTTGGGCCCTGGGCTGTATATGTATACAATGTTACT AGGGAGGCCCCCATTTGAAACTACAAATCTCAAAGAAACTTATAGGTGCATAAGGGAAGCAAGGTATACAATGCC GTCCTCATTGCTGGCTCCTGCCAAGCACTTAATTGCTAGTATGTTGTCCAAAAACCCAGAGGATCGTCCCAGTTT GGATGACATCATTCGACATGACTTTTTTTTGCAGGGCTTCACTCCGGACAGACTGTCTTCTAGCTGTTGTCATAC AGTTCCAGATTTCCACTTATCAAGCCCAGCTAAGAATTTCTTTAAGAAAGCAGCTGCTGCTCTTTTTGGTGGCAA AAAAGACAAAGCAAGATATATTGACACACATAATAGAGTGTCTAAAGAAGATGAAGACATCTACAAGCTTAGGCA TGATTTGAAAAAGACTTCAATAACTCAGCAACCCAGCAAACACAGGACAGATGAGGAGCTCCAGCCACCTACCAC CACAGTTGCCAGGTCTGGAACACCCGCAGTAGAAAACAAGCAGCAGATTGGGGATGCTATTCGGATGATAGTCAG AGGGACTCTTGGCAGCTGTAGCAGCAGCAGTGAATGCCTTGAAGACAGTACCATGGGAAGTGTTGCAGACACAGT GGCAAGGGTTCTTCGGGGATGTCTGGAAAACATGCCGGAAGCTGATTGCATTCCCAAAGAGCAGCTGAGCACATC ATTTCAGTGGGTCACCAAATGGGTTGATTACTCTAACAAATATGGCTTTGGGTACCAGCTCTCAGACCACCGT CGGTGTCCTTTTCAACAATGGTGCTCACATGAGCCTCCTTCCAGACAAAAAAACAGTTCACTATTACGCAGAGCT TGGCCAATGCTCAGTTTTCCCAGCAACAGATGCTCCTGAGCAATTTATTAGTCAAGTGACGGTGCTGAAATACTT TTCTCATTACATGGAGGAGAACCTCATGGATGGTGGAGATCTGCCTAGTGTTACTGATATTCGAAGACCTCGGCT CTACCTCCTTCAGTGGCTAAAATCTGATAAGGCCCTAATGATGCTCTTTAATGATGGCACCTTTCAGGTGAATTT CTACCATGATCATACAAAAATCATCATCTGTAGCCAAAATGAAGAATACCTTCTCACCTACATCAATGAGGATAG GATATCTACAACTTTCAGGCTGACAACTCTGCTGATGTCTGGCTGTTCATCAGAATTAAAAAATCGAATGGAATA TGCCCTGAACATGCTCTTACAAAGATGTAACTGAAAGACTTTTCGAATGGACCCTATGGGACTCCTCTTTTCCAC TGTGAGATCTACAGGGAACCCAAAAGAATGATCTAGAGTATGTTGAAGAAGATGGACATGTGGTGGTACGAAAAC AATTCCCCTGTGGCCTGCTGGACTGGGTGGAACCAGAACAGGCTAAGGCATACAGTTCTTGACTTTGGACAATCC AAGAGTGAACCAGAATGCAGTTTTCCTTGAGATACCTGTTTTAAAAGGTTTTTCAGACAATTTTGCAGAAAGGTG CATTGATTCTTAAATTCTCTCTGTTGAGAGCATTTCAGCCAGAGGACTTTGGAACTGTGAATATACTTCCTGAAG GGGAGGGAGGAGGGAGGAGCTCCCATGTTGTTTAAAGGCTGTAATTGGAGCAGCTTTTTGGCTGCGTAACTGTGA ACTATGGCCATATATATTTTTTTTCATTAATTTTTGAAGATACTTGTGGCTGGAAAAGTGCATTCCTTGTTAAT AACCGTTGGCAATAAAGAGTATGAAAACGC

PCT/US2003/028547

FIGURE 1593

PCT/US2003/028547

1722/6881 FIGURE 1594

MEGITAVTVNQSLLNSLNWRWTPASRRPHPGEEPDQDTQQQVCLLHRQGTVPGAAEQDAGDQLEPPAAGEDGSEQ HGQHEKLKLEAELGNMQGLLEDFKNKYEDEINKRTGMENEFFLIKKDVDKAYMTRQLYEEEIQELQSQISDTSVV LSMDNSRSLDIRGELADKDANAKLSELEAALQWTKQDMGGSCLLEGEESRLESGMQNMSIRTKTTSGYAGGLSST YGGLTSPGLSYGLGSSFGSGAGSCAFSRTCSIRAMIVKKIETHDGKLVSESSDVLLK

PCT/US2003/028547

1723/6881 FIGURE 1595

PCT/US2003/028547

1724/6881 FIGURE 1596

PCT/US2003/028547

1725/6881 FIGURE 1597

CTCTGTCCCTCACTCGCCGCCGACAACCTGTCTCGCCGCGCGCATGCCCTGCAGCCGCCCCACAGAAATGCTTCG GTTACCCACAGTCTTTCGCCAGATGAGACCAGTGTCCAGGGTACTGGCTCCTCATCTCACTCGAGCTTATGCCAA AGATGTAAAATTTGGTGCAGATGCCCGAGCCTTAATGCTTCAAGGTGTAGACCTTTTAGCCGATGCTGTGGCCGT TACAATGGAGCCAAAGGGAAGAACAGTGATTATTGAGCAGAGCTGGGGAAGTCCCAACGTAACAAAAGATGGTGT GACTGTTGCAAAGTCAATTGACTTGAAGGATAAATATAAAAACATTGGAGCTAAACTTGTTCAAGATGTTGCCAA CCAGAAGATTAGCAAAGGTGCTAATCCAGTGGAAATCAGGAGAGGTGTGATGTTAGCTGTTGATGCTGTAATTGC TGAACTTAAAAAGCAGTCTAAACCTGTGACCACCCCTGAAGAAATTGCACAGGTTGCTATGATTTCTGCAAATGG AGACAAAGAAATTGGCAATATCATCTCTGATGCAATGAAAAAGGTTGGAAGAAAGGGTGTCATCACAGTAAAGGA TATTAATACATCAAAAGGTCAGAAATGTGAATTCCAGGATGCCTATGTTCTGTTGAGTGAAAAGAAAATTTCTAG TGTCCAGTCCATTGTACCTGCTCTTGAAATTGCCAATGCTCACCATAAGCCTTTTGGTGATAATCGCTGAAGATGT TGATGGAGAAGCTCTAAGTACACTCATCTTGAATAGGCTAAAGGTTGGTCTTCAGGTTGTGGCAGTCAAGGCTCC AGGGTTTGGTGACAATAGAAAGAACCAACTTAAAGATATGGCTATTGCTACTGGTGGTGCAGTGTTTGGAGAAGA GGGGTTGACCCTGAATCTTGAAGATGTTCAGCCTCATGACTTAGGAAAAGTTGGAGAGGTCATTGTGACCAAAGA CGATGCCATGCTCTTAAAAGGAAAAGGTGACAAGGCTCAACTTGAAAAACGTATTCAAGAAATCATTGGGCAGTT ATGCATTCCAGCCTTGGACTCATTGACTCCAGCTAATGAAGAT

PCT/US2003/028547

FIGURE 1598

GCGGAACGGCTGTTGGTTTCTGCTGGTTGTAGGTCCTTGGCTGGTCGGGCCTCCGGTGTTCTGCTTCTCCCCGCT GAGCTGCTGCCTGGTGAAGAGGAAGCCATCGCCTCCGAGTCACCAGGAACTCGAAAATTAATGCTGAAAATAAG GCGAAGATCAACATGGCAGGCGCAAAGCGCGTTCCTACGGCCCCTGCTGCAACCTCCAAGCCCGGACTGAGGCCA AAACCTTCAGCTACTGGAAAAGTCATTGATAAAAAACTACCAAAACCTCTTGAAAAGGTACCTATGCTGGTGCCA GTGCCAGTGTCTGAGCCAGTGCCAGAGCCAGAACCTGAGCCAGAACCTGAGCCTGTTAAAGAAGAAAAACTTTCG CCTGAGCCTATTTTGGTTGATACTGCCTCTCCAAGCCCAATGGAAACATCTGGATGTGCCCCTGCAGAAGAAGAC CTGTGTCAGGCTTTCTCTGATGTAATTCTTGCAGTAAATGATGTGGATGCAGAAGATGGAGCTGATCCAAACCTT CTACTGGGTCGGGAAGTCACTGGAAACATGAGAGCCATCCTAATTGACTGGCTAGTACAGGTTCAAATGAAATTC AGGTTGTTGCAGGAGACCATGTACATGACTGTCTCCATTATTGATCGGTTCATGCAGAATAATTGTGTGCCCAAG TCTCAAATTGCAGCAGGAGCTTTTTGCTTAGCACTGAAAATTCTGGATAATGGTGAATGGACACCAACTCTACAA CATTACCTGTCATATACTGAAGAATCTCTTCTTCCAGTTATGCAGCACCTGGCTAAGAATGTAGTCATGGTAAAT CAAGGACTTACAAAGCACATGACTGTCAAGAACAAGTATGCCACATCGAAGCATGCTAAGATCAGCACTCTACCA $\texttt{CAGCTGAATTCTGCACTAGTTCAAGATTTAGCCAAGGCTGTGGCAAAGGTG} \underline{\textbf{TAA}} \underline{\texttt{CTTGTAAACTTGAGTTGGAGT}}$ AAA

PCT/US2003/028547

1727/6881 FIGURE 1599

MALRVTRNSKINAENKAKINMAGAKRVPTAPAATSKPGLRPRTALGDIGNKVSEQLQAKMPMKKEAKPSATGKVI DKKLPKPLEKVPMLVPVPVSEPVPEPEPEPEPEPEVKEEKLSPEPILVDTASPSPMETSGCAPAEEDLCQAFSDVI LAVNDVDAEDGADPNLCSEYVKDIYAYLRQLEEEQAVRPKYLLGREVTGNMRAILIDWLVQVQMKFRLLQETMYM TVSIIDRFMQNNCVPKKMLQLVGVTAMFIASKYEEMYPPEIGDFAFVTDNTYTKHQIRQMEMKILRALNFGLGRP LPLHFLRRASKIGEVDVEQHTLAKYLMELTMLDYDMVHFPPSQIAAGAFCLALKILDNGEWTPTLQHYLSYTEES LLPVMQHLAKNVVMVNQGLTKHMTVKNKYATSKHAKISTLPQLNSALVQDLAKAVAKV 1

WO 2004/030615

PCT/US2003/028547

1728/6881 FIGURE 1600

GCTGGCAAGCGCTTCCTGCGCAGCGCCTAGGCGACCTGGAGTTTGTGACGCTGTGATGGTCTAGAGGCTGGAGAT TCCTCAAGCGTTTTTCTTATAAGGCTAAAAATTCACAAAGCATATATCAATGAATCAGGAGGATCTAGATCCGGA TAGTACTACAGATGTGGGAGATGTTACAAATACTGAAGAAGAACTTATTAGAGAATGTGAAGAAATGTGGAAAGA TATGGAAGAATGTCAGAATAAATTATCACTTATTGGAACTGAAACACTCACCGATTCAAATGCTCAGCTATCATT GTTAATTATGCAAGTAAAATGTTTAACCGCTGAACTCAGTCAATGGCAGAAAAAAACACCTGAAACAATTCCCTT GACTGAAGACGTTCTCATAACATTAGGAAAAGAAGAGTTCCAAAAGCTGAGACAAGATCTTGAAATGGTACTGTC CACTAAGGAGTCAAAGAATGAAAAGTTAAAGGAAGACTTAGAAAGGGAACAACGGTGGTTGGATGAACAGCAACA GATAATGGAATCTCTTAATGTACTACACAGTGAATTGAAAAATAAGGTTGAAACATTTTCTGAATCAAGAATCTT TAATGAACTGAAAACTAAAATGCTTAATATAAAAGAATATAAGGAGAAACTCTTGAGTACCTTGGGCGAGTTTCT AGAAGACCATTTTCCTCTGCCTGATAGAAGTGTTAAAAAGAAAAAGAAAAACATTCAAGAATCATCTGTAAACCT GATAACACTGCATGAAATGTTAGAGATTCTTATAAATAGATTATTTGATGTTCCACATGATCCATATGTCAAAAT TAGTGATTCCTTTTGGCCACCTTATGTTGAGCTGCTGCTGCGTAATGGAATTGCCTTGAGACATCCAGAAGATCC AACCCGAATAAGATTAGAAGCTTTCCATCAG<u>TAA</u>AAGGATGTTTTCTTTTTTCACACAGTAAAAATTCTTATCAT TCAAGGATATTGGAACCACAGGACTATTTGGATAAAAAACATTATTTGCAAATTAATGCGCATAGGCCATCTTAC AGTGTTTTAAACTATATGGATAAGAATGCAGGTAGATAATATTCTAGGCATAAAACATTTAATGTACCTTACCTC CTTTTATGCATTTTGAGTTCCAGCTGGTGCTTCTTTATATTTAGAAATTATAATGGGAAGGTCATTTAATTTACA GATGGTTTTAAAATTGAGGTAATATCTGAGGTGGCATAATTTAAAAATATTTAGCAAATTTGTTTCATATATACT GTCTTATTTCTAGATTTGTTTAAAATTGGAATATGAAAAACTAATGGATAAAGCTAGCATAAAATTGATATTTA GTTTGTATTATTAATATCATGTTACCTTATATATTAATCTACTCTTGATTCTGCTAATTATTACCAACAAAAT

PCT/US2003/028547

FIGURE 1601

MNQEDLDPDSTTDVGDVTNTEEELIRECEEMWKDMEECQNKLSLIGTETLTDSNAQLSLLIMQVKCLTAELSQWQ KKTPETIPLTEDVLITLGKEEFQKLRQDLEMVLSTKESKNEKLKEDLEREQRWLDEQQQIMESLNVLHSELKNKV ETFSESRIFNELKTKMLNIKEYKEKLLSTLGEFLEDHFPLPDRSVKKKKKNIQESSVNLITLHEMLEILINRLFD VPHDPYVKISDSFWPPYVELLLRNGIALRHPEDPTRIRLEAFHQ

PCT/US2003/028547

1730/6881 FIGURE 1602

TCCCTTTCCCTATTTGAAATTGGCATCGAGGGGGCTAAGTTCGGGTGGCAGCGCCGGGCGCAACGCAGGG GCACTCTTCGCTTCGCCATCCCCGACCCTTCACCCCGAGGACTGGGCGCCTCCTCCGGCGCAGCTGAGGGAGCG GGGGCCGGTCTCCTGCTCGGTTGTCGAGCCTCCATGTCGGATAATCAGAGCTGGAACTCGTCGGGCTCGGAGGAG GATCCAGAGACGGAGTCTGGGCCCCCTGTGGAGCGCTGCGGGGTCCTCAGTAAGTGGACAAACTACATTCATGGG TGGCAGGATCGTTGGGTAGTTTTGAAAAATAATGCTCTGAGTTACTACAAATCTGAAGATGAAACAGAGTATGGC TGCAGAGGATCCATCTGTCTTAGCAAGGCTGTCATCACACCTCACGATTTTGATGAATGTCGATTTGATATTAGT GTAAATGATAGTGTTTGGTATCTTCGTGCTCAGGATCCAGATCATAGACAGCAATGGATAGATGCCATTGAACAG CACAAGACTGAATCTGGATATGGATCTGAATCCAGCTTGCGTCGACATGGCTCAATGGTGTCCCTGGTGTCTGGA GCAAGTGGCTACTCTGCAACATCCACCTCTTCATTCAAGAAAGGCCACAGTTTACGTGAGAAGTTGGCTGAAATG GAAACATTTAGAGACATCTTATGTAGACAAGTTGACACGCTACAGAAGTACTTTGATGCCTGTGCTGATGCTGTC TCTAAGGATGAACTTCAAAGGGATAAAGTGGTAGAAGATGATGAAGATGACTTTCCTACAACGCGTTCTGATGGT GACTTCTTGCATAGTACCAACGGCAATAAAGAAAAGTTATTTCCACATGTGACACCAAAAGGAATTAATGGTATA GACTTTAAAGGGGAAGCGATAACITTTAAAGCAACTACTGCTGGAATCCTTGCAACACTTTCTCATTGTATTGAA GCATATAAAAATGCAATGACAGAACTTAAGAAAAAATCCCACTTTGGAGGACCAGATTATGAAGAAGGCCCTAAC TCACAGAGTGAAAAGGTGAGATTACATTGGCCTACATCCTTGCCCTCTGGAGATGCCTTTTCTTCTGTGGGGACA CATAGATTTGTCCAAAAGCCCTATAGTCGCTCTTCCTCCATGTCTTCCATTGATCTAGTCAGTGCCTCTGATGAT GTTCACAGATTCAGCTCCCAGGTTGAAGAGATGGTGCAGAACCACATGACTTACTCATTACAGGATGTAGGCGGA GATGCCAATTGGCAGTTGGTTGTAGAAGAAGGAGAAATGAAGGTATACAGAAGAAGAAGTAGAAAATGGGATT GTTCTGGATCCTTTAAAAGCTACCCATGCAGTTAAAGGCGTCACAGGACATGAAGTCTGCAATTATTTCTGGAAT GTTGACGTTCGCAATGACTGGGAAACAACTATAGAAAACTTTCATGTGGTGGAAACATTAGCTGATAATGCAATC ATCATTTATCAAACACACAAGAGGGTGTGGCCTGCTTCTCAGCGAGACGTATTATATCTTTCTGTCATTCGAAAG ATACCAGCCTTGACTGAAAATGACCCTGAAACTTGGATAGTTTGTAATTTTTCTGTGGATCATGACAGTGCTCCT CTAAACAACCGATGTGTCCGTGCCAAAATAAATGTTGCTATGATTTGTCAAACCTTGGTAAGCCCACCAGAGGGA AACCAGGAAATTAGCAGGGACAACATTCTATGCAAGATTACATATGTAGCTAATGTGAACCCTGGAGGATGGGCA CCAGCCTCAGTGTTAAGGGCAGTGGCAAAGCGAGAGTATCCTAAATTTCTAAAACGTTTTACTTCTTACGTCCAA GAAAAAACTGCAGGAAAGCCTATTTTGTTCTAGTATTAACAGGTACTAGAAGATATGTTTTATCTTTTTTAACT TTATTTGACTAATATGACTGTCAATACTAAAATTTAGTTGTTGAAAGTATTTACTATGTTTTTT

PCT/US2003/028547

1731/6881 FIGURE 1603

MSDNQSWNSSGSEEDPETESGPPVERCGVLSKWTNYIHGWQDRWVVLKNNALSYYKSEDETEYGCRGSICLSKAV ITPHDFDECRFDISVNDSVWYLRAQDPDHRQQWIDAIEQHKTESGYGSESSLRRHGSMVSLVSGASGYSATSTSS FKKGHSLREKLAEMETFRDILCRQVDTLQKYFDACADAVSKDELQRDKVVEDDEDDFPTTRSDGDFLHSTNGNKE KLFPHVTPKGINGIDFKGEAITFKATTAGILATLSHCIELMVKREDSWQKRLDKETEKKRRTEEAYKNAMTELKK KSHFGGPDYEEGPNSLINEEEFFDAVEAALDRQDKIEEQSQSEKVRLHWPTSLPSGDAFSSVGTHRFVQKPYSRS SSMSSIDLVSASDDVHRFSSQVEEMVQNHMTYSLQDVGGDANWQLVVEEGEMKVYRREVEENGIVLDPLKATHAV KGVTGHEVCNYFWNVDVRNDWETTIENFHVVETLADNAIIIYQTHKRVWPASQRDVLYLSVIRKIPALTENDPET WIVCNFSVDHDSAPLNNRCVRAKINVAMICQTLVSPPEGNQEISRDNILCKITYVANVNPGGWAPASVLRAVAKR EYPKFLKRFTSYVQEKTAGKPILF

PCT/US2003/028547

1732/6881 FIGURE 1604

AGTACAATCTGCTGCCCAGGACCTGGACATTGACAGATAAAATGAAGTGGGTCAGTTAACTACAGAGGGAAGAAT ATGAAGAACTGCTTCATTATGCTATAGTGACTCCAAATATTGAACCCTGTGCTTCACAGTCATCTCATCCTAAGG GAGAATTGGTGCCAGATGTCAGAATTTCTACAATTCATGATATTCTTCATAGTCAAGGAAATAACTCTGAAGTAA GAGAAACTGCAATAGAAGTTGGAAAAGGATGTGATTTCCATATTTCAAGTCATTCAAAGACAGATGCTACAACTT TTCTTTTATTCAGAGTCATCACCAGTGTTATCGCCAAGGAAGCCTTCTCACCCAGTCATGGATTTTTTCAGTTCA CATCTTTTAGCTGACTCTTCCTCACCAGCAACAAATTCTAGTCATACAGATGCCCATGAAATACTTGTGAGCGAT TTTCTTGTTTCTGATGAAAACCTTCAGAAGATGGAAAATGTGCTTGATCTTTGGAGTTCAGGTCTTAAGACAAAC AAACATGCAGCACATTTAAAACAACTGTGTAATCAGATCAATGAATTGAAGGAGCTGCAAAAAACCTTTGAAATC ATGAGAACATTCTTCCACTGGCGAATCGGCCATGTCAGAGCCAGACAGGATGTTTATGAAGGTAAACTAGCTGAC CAGTACTACCAGAGAACTTTACTGAAGAAAGTCTGGAAAGTCTGGCGTTCCGTAGTGCAAAAGCAGTGGAAAGAT GTGGTAGAAAGAGCTTGTCAAGCAAGAGCTGAAGAAGTTTGTATCCAGATTTCCAATGATTATGAAGCCAAAGTT GCTATGTTATCTGGAGCTTTGGAAAATGCAAAAGCTGAGATTCAAAGAATGCAACATGAAAAAGAGCACTTTGAA GATTÇCATGAAAAAGCTTTCATGAGGGGTGTATGTGCATTAAATCTTGAAGCCATGACTATATTTCAAAACAGA AATGATGCAGCTCCTCCGATGCCCTTACCAGTTACATCACCACTGCTGCCATCCCCACCAGCCGCCGTCGGAGGA GCCAGCGCGACTGCCGTTCCCTCAGCTGCTTCGATGACTTCTACCAGGGCTGCTTCCGCATCTTCTGTTCACGTT TCTGCACAACAGAAAGCAGGAAGAACTATTACAGCCCGGATCACAGGAAGATGTGATTTTGCTTCAAAAAATAGA ATTAGCAGCAGTTTAGCTATAATGGGAGTTTCTCCTCCCATGAGCTCAGTTGTTGTGGAAAAACATCATCCAGTC ACAGTGCAAACCATTCCTCAAGCAACTGCAGCAAAATATCCCCGGACCATTCATCCTGAAAGTAGTACCTCAGCT TCCAGATCACTTGGAACCAGATCAGCTCACACCCAGTCTCTCACAAGTGTTCATTCCATAAAAGTGGTTGACTAA AGTGAATATGTCCATAGTGGGGTCTTTTAATCCCTCTGGTCTTACCAAGGGTTAGAAGTCTTTTGGTTTTAACTT TTCCATATTGTTAGAACATCATGGAGACATCATGTTCATCTGTTCAAAATTACAAGAGGCTTTTTCAAGCTCTAC тт

PCT/US2003/028547

1733/6881 FIGURE 1605

MSSDEEKYSLPVVQNDSSRGSSVSSNLQEEYEELLHYAIVTPNIEPCASQSSHPKGELVPDVRISTIHDILHSQG
NNSEVRETAIEVGKGCDFHISSHSKTDESSPVLSPRKPSHPVMDFFSSHLLADSSSPATNSSHTDAHEILVSDFL
VSDENLQKMENVLDLWSSGLKTNIISELSKWRLNFIDWHRMEMRKEKEKHAAHLKQLCNQINELKELQKTFEISI
GRKDEVISSLSHAIGKQKEKIELMRTFFHWRIGHVRARQDVYEGKLADQYYQRTLLKKVWKVWRSVVQKQWKDVV
ERACQARAEEVCIQISNDYEAKVAMLSGALENAKAEIQRMQHEKEHFEDSMKKAFMRGVCALNLEAMTIFQNRND
AGIDSTNNKKEEYGPGVQGKEHSAHLDPSAPPMPLPVTSPLLPSPPAAVGGASATAVPSAASMTSTRAASASSVH
VPVSALGAGSAATAASEEMYVPRVVTSAQQKAGRTITARITGRCDFASKNRISSSLAIMGVSPPMSSVVVEKHHP
VTVQTIPQATAAKYPRTIHPESSTSASRSLGTRSAHTQSLTSVHSIKVVD

PCT/US2003/028547

1734/6881 FIGURE 1606

ATGGAGGGTCGTGGCTATGCCAAGGAGGGACTAAAAGATCTGGCCACCAGGACACCCAGAACTCCTAAGAAGAAA TTAACATCTTGTGAGCAGCCCTTTGGCTGTGAAAATGCAAATGACTCAGACTGGCTGCCAAGAGTCACCTGTGAA GCTCAACTGGCACAGGACTCAGGGCTGAGCTCCATTCTTAACTCTCCATCCCATACAGCCAAACAAGCAGAACAC AGGTTGCGCCCAAGGGTTCTGAACCCAGGATGTATAAAGAAGATGGGCCAGCGAGAGCTCACCGGATGCCGCCAG AACCGCGACGCTTTCCAAGGCACGGCCCCTCTCTCGGGGCGAACCCATTCCAGGGCGCCCTTCACAAAG AAAAGAGAACTCTCCCCGGGGCTCCCGCCGGCTTCTCCGGGATCGGTCACGTTTCCCAGAATTAAACAGAAAAAG CAGGTGGGGAATGGCAGTGTCCGGCTGAGGGAGGGAGCTGCCACACTGCCTGATCATTCGCGTGGCAGCAGCGGG GAGGAGATCGGCAGCACCTTTGGCCACAGAGCTGCGCCTCTGTCACAAACAGGCAGCGCTGCAGGCGGCCAGAGA TCCACTTCCACAGATTCTCGTGGCCAGGGCAGGGGTGTTGTTGTGGTGGGCAGACTGGCCAGGCGACCCTGGCCCA CCATCACCCTCTCTCACAGCCCAGATGCGTTCTCGGGGCCCCAGGCCTGCACCCGTTTCTTCTCCCGCATCACG GGGCTGGGGCCAGCCGCGGGGGGGGGGGCTCGGCAGTTCCAAAAGCGCTGAGGCCAGCCTCTCTGCAGGGTGTG GCCGAGTCGGCCGAAGTGCTGCCACCCGGCTGAGGACTGCCATCAGGCTACAAGGCCACTTTGCCACAACAGGC AGAAAACAAGGAACACTTGGGAATTTACATCTCCTTGTTTGGCCCTTAGACAATGATCAACTTGTATTGGAATAT GAAACCCAGCTCCCTGGCCTGAGTCTGATCAAACTCTCAGGATTTTTAAAAACCCTCAGTGGACAAAAGTCTACT CACGCTGCTTTGGTAGAATTGGACATAGCCAAGGAGCTCATCAGAAAAGGAGCTGCTAGTCACAGGCAGCAACAA ACCCACCTCCACACAGGGATCCACTGTGGGGCTGCAATAACTGCTCCTTCTCTGAGTGATACAGGACATTCTGAG GAAAAGTGGCTGGTGGATGGGCAGTATGTAATGACACAAGCTCATGAGTACAAGCTGAGACATGATGGGAGTCTA CGGGTCCCATCTACACAGCTTGATGCAGCTCTTCCAATTAATGGCCAGTGTCTGGCTGAACTATTATAG

PCT/US2003/028547

1735/6881 FIGURE 1607

MEGRGYAKEGLKDLATRTPRTPKKKLTSCEQPFGCENANDSDWLPRVTCEAQLAQDSGLSSILNSPSHTAKQAEH RLRPRVLNPGCIKKMGQRELTGCRQNRDAFQGTGPSLGANPFQGALPFTKKRELSPGLPPASPGSVTFPRIKQKK PGSGQVGKRKRGLFGCDMWVEGHKGQVGNGSVRLREGAATLPDHSRGSSGEEIGSTFGHRAAPLSQTRTAIRLQG HFATTGRKQGTLGNLHLLVWPLDNDQLVLEYETQLPGLSLIKLSGFLKTLSGQKSTHAALVELDIAKELIRKGAA SHRQQQTHLHTGIHCGAAITAPSLSDTGHSEEKWLVDGQYVMTQAHEYKLRHDGSLRVPSTQLDAALPINGQCLA ELL

WO 2004/030615 PCT/US2003/028547

1736/6881 FIGURE 1608

GGGGCGCACAGAGCCAGAGGGGCTTGCGAGCGGCGGCTGAGGGACCGCGGGGAGGGGGCGCCGAGCGGCTCCAGC CCGCCCCGCTAACCGCCCCAGACACAGCGCTCGCCGAGGGTCGCTTGGACCCTGATCTTACCCGTGGGCACCCTG CGCTCTGCCTGCCGCGAAGACCGGCTCCCCGACCCGCAGAAGTCAGGAGAGAGGGTGAAGCGGAGCAGCCCGAGG CGGGGCAGCCTCCCGGAGCAGCGCCGCAGAGCCCGGGACAATGGGGCCGCGGCGGCTGCTGCTGGTGGCCGCC TGCTTCAGTCTGTGCGGCCCGCTGTTGTCTGCCCGCACCCGGGCCCGCAGGCCAGAATCAAAAGCAACAAATGCC ACCTTAGATCCCCGGTCATTTCTTCTCAGGAACCCCAATGATAAATATGAACCATTTTGGGAGGATGAGGAGAAA AATGAAAGTGGGTTAACTGAATACAGATTAGTCTCCATCAATAAAAGCAGTCCTCTTCAAAAAACAACTTCCTGCA TTCATCTCAGAAGATGCCTCCGGATATTTGACCAGCTCCTGGCTGACACTCTTTGTCCCATCTGTGTACACCGGA GTGTTTGTAGTCAGCCTCCCACTAAACATCATGGCCATCGTTGTGTTCATCCTGAAAATGAAGGTCAAGAAGCCG GCGGTGGTGTACATGCTGCACCTGGCCACGGCAGATGTGCTGTTTTGTGTCTGTGCTCCCCTTTAAGATCAGCTAT TACTTTTCCGGCAGTGATTGGCAGTTTGGGTCTGAATTGTGTCGCTTCGTCACTGCAGCATTTTACTGTAACATG TACGCCTCTATCTTGCTCATGACAGTCATAAGCATTGACCGGTTTCTGGCTGTGGTGTATCCCATGCAGTCCCTC TCCTGGCGTACTCTGGGAAGGGCTTCCTTCACTTGTCTGGCCATCTGGGCCTTTGGCCATCGCAGGGGTAGTGCCT CTGCTCCTCAAGGAGCAAACCATCCAGGTGCCCGGGCTCAACATCACTACCTGTCATGATGTGCTCAATGAAACC ACGGTCTGTTATGTGTCTATCATTCGATGTCTTAGCTCTTCCGCAGTTGCCAACCGCAGCAAGAAGTCCCGGGCT TTGTTCCTGTCAGCTGCTGTTTTCTGCATCTTCATCATTTGCTTCGGACCCACAAACGTCCTCCTGATTGCGCAT ATAAGCTGCTGCATCGACCCCCTAATTTACTATTACGCTTCCTCTGAGTGCCAGAGGTACGTCTACAGTATCTTA TGCTGCAAAGAAGTTCCGATCCCAGCAGTTATAACAGCAGTGGGCAGTTGATGGCAAGTAAAATGGATACCTGC TCTAGTAACCTGAATAACAGCATATACAAAAAGCTGTTAACTTAGGAAAAGGGACTGCTGGGAGGTTAAAAAGAA CAGATGTACGACTTGCATACCTGCTTTTTATGGGAGCTGTCAAGCATGTATTTTTGTCAATTACCAGAAAGATAA GTATAGAATAGGCACTTTAAAACACTCTTTCCCCGCACCCCAGCAATTATGAAAATAATCTCTGATTCCCTGATT TAATATGCAAAGTCTAGGTTGGTAGAGTTTAGCCCTGAACATTTCATGGTGTTCATCAACAGTGAGAGACTCCAT AGTTTGGGCTTGTACCACTTTTGCAAATAAGTGTATTTTGAAATTGTTTGACGGCAAGGTTTAAGTTATTAAGAG GTAAGACTTAGTACTATCTGTGCGTAGAAGTTCTAGTGTTTTCAATTTTAAACATATCCAAGTTTGAATTCCTAA AATTATGGAAACAGATGAAAAGCCTCTGTTTTGATATGGGTAGTATTTTTTACATTTTACACACTGTACACATAA TCCGCCCCGATGGAGGACTCCAGGCAGCAGACACATGCCAGGGCCATGTCAGACACAGATTGGCCAGAAACCTT CCTGCTGAGCCTCACAGCAGTGAGACTGGGGCCACTACATTTGCTCCATCCTCGGGATTGGCTGTGAACTGAT CATGTTTATGAGAAACTGGCAAAGCAGAATGTGATATCCTAGGAGGTAATGACCATGAAAGACTTCTCTACCCAT CTTAAAAACAACGAAAGAAGGCATGGACTTCTGGATGCCCATCCACTGGGTGTAAACACATCTAGTAGTTGTTCT GAAATGTCAGTTCTGATATGGAAGCACCCATTATGCGCTGTGGCCACTCCAATAGGTGCTGAGTGTACAGAGTGG CACACAAACAAGGCCTGTCAGCTAAAGAAGTTTGAACATTTGGGTTACTATTTCTTGTGGTTATAACTTAATGAA ATAGAATTGACATTGAAATCTAGGAAAATTATTCTATAATTTCCATTTACTTAAGACTTAATGAGACTTTAAAAAG CATTTTTTAACCTCCTAAGTATCAAGTATAGAAAATCTTCATGGAATTCACAAAGTAATTTGGAAATTAGGTTGA AAAGAGCAGGCCAGGCGGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCTGAGGCGGGTGGATCACGAG CGTGGTGGCAGGCACCTGTAGTCCCAGCTACTCGGGAGGCTGAGGCAGGAGACTGGCGTGAACCCAGGAGGCGGA CCTTGTAGTGAGCCGAGATCGCGCCACTGTGCTCCAGCCTGGGCAACAGAGCAAGACTCCATCTC

PCT/US2003/028547

1737/6881 FIGURE 1609

PCT/US2003/028547

1738/6881 FIGURE 1610

PCT/US2003/028547

1739/6881 FIGURE 1611

PCT/US2003/028547

1740/6881 FIGURE 1612

AAACCTCGCCCAGATTCAGGCGTGTAAACCAGCCGGAGCGGCGGCGGCAGCGCAGGACCGCCGTGGCGCCTAGAG TAGCGACCCGCGGGGAGCACGGGGCGACGCTGCAGAGACCCGGTGACAGCTGTATGCTTGAAATCTTGGAT ACTGCAGGAACGGAGCAATTTACAGCAATGAGGGATTTATACATGAAAAATGGACAAGGGTTTGCATTAGTTTAT TCCATCACAGCACAGTCCACATTTAACGATTTACAAGACCTGAGAGAACAGATTCTTCGAGTTAAAGACACTGAT TTTTATGACCTAGTGCGGCAAATTAACAGAAAAACTCCAGTGCCTGGGAAGGCTCGCAAAAAGTCATCATGTCAG CTGCTTTAATATACTAAATGCATTGTAGCTCTGAGCCAGGTCTGAAGAACTGTTGCCCAATTCAACAGTGCCAGC ATTCCAACTTTGTTAAACCTACCAACATCTTAAATGGACTTTCCTGTGGTGGTACCCTTTAAGAGGCGGATGAAA GCTACTATATCAGTTTGCACATTCTAATCACTTTCCAGTATCACAAGAGAGATTTTTACTTATATAATAGTCCTA GAGTATGCAGCTGGTAAAACCAGAGGCTACATCCAGTATTACTGCTAAGAGACATTCTTCATCCACCAATGTTGT ACATGTATGAAAATGGTGTACTGTATACTTTAACATGCCCCATACTTTGTATTGGAGAGTACAATAATGTAAATC CTAAAAGCACCACTATTTTAGCATAATAAAAGAAAGTCCAAAGAGCTCCTATATAGACTACTCCAGATAACTTCG CTTCTTTGATACTTGTAGCTTATTGTAATTTTTTTTAAGAAATTCAAGGTCATTATTATTGTACAAAATAAGCGC TTTGATTAACACAGCTATATAGTTTTTTTAATTTTTAATGTCTTAGATTAAAGACGTTGCCTTTAATATCTGTTG TAGTCGTGTGTACAGTGGGGGTCTACAACAAGAAGTGTATATT

PCT/US2003/028547

1741/6881 FIGURE 1613

 ${\tt MREYKLVVLGSRGVGKSALTVQFVQGIFVEKYDPTIEDSYREQVEVDAQQCMLEILDTAGTEQFTAMRDLYMKNG} \\ {\tt QGFALVYSITAQSTFNDLQDLREQILRVKDTDDIFYDLVRQINRKTPVPGKARKKSSCQLL} \\$

PCT/US2003/028547

1742/6881 FIGURE 1614

GCTCCGAGAGGAAAATGAGGGCGTGTATAATGGAAGCTGGGGAGGCCGGGGAGAGGTTATTATGACCTGTTGCTC AGAAGCATGGAAAATCTGGGCAGATATTCCTGCTCCAAAACGAGGAGAAATAGTAAGACAGATTGACGATGCCTT GTGGGAGAAGATCCAAGTACTAGGAAGCTTGGTGTCTTTGGAGATGGGGAAAATCTTAGTGGAAGGTGTGGGTGA AGTTCAGGAGTATGTGGATATCTGTGACTATGCTGTTGGTTTATCAAGGATGATTGGAGGACCTATCTTGCCTTC TGAAAGACCTGGCCATGCACTGATTGAGCAGTGGAATCCTGTAGGCCTGGTTGGAATCATCACGGCATTCAATTT CCCTGTGGCAGTGTATGGTTGGAACACGCCATTGTCATGATCTGTGGAAATGTCTGCCTCTGGAAAGGAGCTCC AACCACTTCCCTCATTAGTGTGGCTGTCACAAAGATAATAGCCAAGGTTCTGGAGGACAACAAGCTGCTTGGTGC AATTTGTTCCTTGACTTGTGGTGGAGCAGATACCGGCACAGCAATGGCCAAAGATGAACGAGTGAACCTGCTGTC CTTCACCGGGAGCACTCAGGTGGGAAAACAGATGGCCCTGATGGTGCAGGAGAGGTTTGGGAGAAGTTTGTTGGA ACTTGGAGGAAACAGTACCATTATTGCCTTTGAAGATGCAGACCTCAGCTTAGTTGTTCCATCAGCTCTCTTCAC TGTAAACAGACTTAAAAAGGCCTACGCACAGATCCGAGTTGGGAACCCATGGGACCCTAATGTTCTCTATGGGCC ACTCCACACCAAGCAGGCAGTGAGCATGTTTCTTGGAGCAGCGGAAGAAGCAAAGAAGAAGGTAGCACAGTGGT CTATGGGGGCAAGGTTATGGATCGCCCTGGAAATTATGTAGAACCGACAATTGTGACAGGTCTTGCCCACGATGC ATCCATTGCACACACAGAGACTTTTGCTCCGATTCTGTATGTCTTTAAATTCAAGAATGAAGAAGAGGTCTTTGC ATGGAATACTGAAGTAAAACAGAGACTTTCAAGTAGCAACTTTACCAAAGATCTGGGCCAGAATCTTTCGCTGGCT TGGACCTAAAGGATCAGACTGTGGCACTGTAAATGTCAACATTCCAACAAGTGGGGCTGAGATTGGAGGTGCCTT TGGAGGAGAAAAGCACACTGGTGGTGGCAGGGAATCTGGCAGTGATGCCTGGAAACAGTACATGAGAAGGTCTAC TTGTACTATCAACTACAGTAAAGACTTTCCTCTGGCCCAAGGAATCAAGTTTCAGTAAAGGTGTTTTAGATGAAC ATCCCTTAATTTGAGGTGTTCGGCAGCTGTTTTTGAAGAAGACAAAGAAAATTAAAGTTTTCCTTGAATAAATGC ATTATTATGACTGTGACAGTGACTAATCCCCCTATGACCCCAAAGCCCTGATTAAATCAAAAGACTCCTTTTTTA AAAATCAAAATAAAATTGTTACAACAT

PCT/US2003/028547

1743/6881 FIGURE 1615

PCT/US2003/028547

1744/6881 FIGURE 1616

MEGVEEKKKEVPAVPETLKKKRRNFVELKIKRLRKKFAQKMLRKARRKLIYEKAKHYHKEYRQMYRTEIRVARMA RKAGNFYVPAEPKLAFVIRIRGISAVSPKVRKVLQLLRLRQIFNGTFVKLNKASINMLRIVEPYIAWGYPNLKSV NELIYKRGYGKINKKRIALTDNALIARSLGKYGIICMEDLIHEIYTVGKRFKEANNFLWPFKLSSPRGGMKKKTT HFVEGRDAGNREDQINRLTRRMN

PCT/US2003/028547

1745/6881 FIGURE 1617

PCT/US2003/028547

1746/6881 FIGURE 1618

MDLTCDKMCSMVKKWQTMIEAHVDVRTIDGYLLRLFCVGFTKKRNNQIQKTSYAQHQRVRQIRKKMMEIMTREDS RQHWKRHRKGLPIYPLHDVFVRKVKMLKKPKFELGKLMELHGEGSSSGKATGDERGAKVERADGFEPPVQESV

PCT/US2003/028547

FIGURE 1619

TTTCTGCCCATGGACACCGCCGAAGAAGCATTGTTAAAGTCTCTTCACCCTGCCGTCATGTCTAAGTCAGAGT CTCCTGAAGAGCCCGAACAGCTGAGGAAGCTCTTCATTGGAGGGCTGAGCTTTGAAACAACTG<u>ATG</u>AGAGCCTTG AGGAGCCATTTTGAGCAATGGGGAATGCTCACGGACTGTGTGGTCATGAGAGATCCAAACACCAAGCACCCCAGG GGCTTTGGGTTTGTCACATATGCTACTGTGGAGGAGGTGGATGCAGCCATGAATGCAAGGCCACACAAGGTGGAT GGAAGAGTTGTGGAACCAAAGAGAGCTGTCTCGAGAGAAGATTCTGAAAGACCAGGTGCCCACTTAACTGTGAAA AAGATATTTGTTGGTGGCATTAAAGAAGACACTGAAGAACATCACCTAAGAGATGATTTTGAACAGTATGGAAAA ATTGAAGTGATTGAAATCATGACTGACCGAGGCAGTGGCAAGAAAAGGGGGCTTTGCCTTTGTAAATTTTGACGAC CATGACTCCATGGATAAGATTGTCATTCAGAAATACCATACTGTGAATGGCCACAACTGTGAAGTTAGGAAAGCC CCGTCACAGCAAGAGATGGATAGTGCTTCATCCAGCCAAAGAGGTCGAAGTGGTTCTGGAAACTTTGGTGGTGGT CGTGGAGGTGGTTTCGGTGGGAATGACAACTTTGGTCATGGAGGAAACTTCAGTGGTTGTGGTGGCTTTGGTGGC GGTGGTGGAAGCTACAATGATTTTGGCAATTACAACAATCAGTCTTCAAATTTTGGACCCATGAAGGGAGGAAAT TTTGGAGGCAGAAGCTCTGGCCCTTATGGTGGTGGAGGCCAATACTTTGCAAAACCACAAAACCAAGGTGGCTAT GGCGGTTCCAGTAGCAGCGGTAGCTATGGCAGTGGCAGAAGATTT<u>TAA</u>TTAGGAAACAAAGCTTAGCAGGAGCGG AGAGCCAGAGAAGTGACAGGGAAGCTACAGGTTACAACAGATTTGTGAACTCAGCCAAGCACAGTGGTGGCAGGG CCTAGCTGCTACAAAGAAGACATGTTTTAGACAAATACTCATGTGTATGGGCAAAAAACTCGAGGACTGTATTTG GTAGATTTTTTTTTGCACCTATGCTGTTGATTGCTAATGTAATAGTCTGATCGTGATGCTGAATAAATGTCTTT TCTTTTTAATGTGCTGTAAAGTTAGTCTACTCTGAAGCCATCTTGGTAAATTTCCCCAACAGTGTGAAGTTAG AATTCCTTCAGGGTGATGCCAGGTTCTATTTGGAATTTATATACAACCTGCTTGGAGGAGAAGCCATTGTCTTC AGAAACCTTGGTGTAGTTGAACTGATAGTTACCGTTGTGACCTGAAGTTCACCATTAAAAGGGATTACCCAAGCA AAATCATGGAATTATTGGTTATAAAAGTGATTGTTGGCACATCCTATGCAATATATCTAAATTGAATAATGGTAC TAGATAAAATTATAGATGGGAATGAAGCTTGTGTATCATCCATTATCATGTGTAATCAATAAATGATTTAATTCT **CTTGAA**

PCT/US2003/028547

1748/6881 FIGURE 1620

MRALRSHFEQWGMLTDCVVMRDPNTKHPRGFGFVTYATVEEVDAAMNARPHKVDGRVVEPKRAVSREDSERPGAH LTVKKIFVGGIKEDTEEHHLRDDFEQYGKIEVIEIMTDRGSGKKRGFAFVNFDDHDSMDKIVIQKYHTVNGHNCE VRKAPSQQEMDSASSSQRGRSGSGNFGGGRGGGFGGNDNFGHGGNFSGCGGFGGSHGGGGYGGSGDGYNGFGNDG SDFGGGGSYNDFGNYNNQSSNFGPMKGGNFGGRSSGPYGGGGQYFAKPQNQGGYGGSSSSGSYGSGRRF

PCT/US2003/028547

1749/6881 FIGURE 1621

PCT/US2003/028547

1750/6881 FIGURE 1622

PCT/US2003/028547

1751/6881 FIGURE 1623

PCT/US2003/028547

1752/6881 FIGURE 1624

CAAAGGCTACTAAGTTAATGGTATTTTCTGCACAGAAAATACCATTAACTTAGTAGCCTTTGCTTAAAGGTGGGA
TTAATTCTCCATGAAGTCAGAATGAGACAATAAGCAGCATTAACTTCATAGGCACACAGAACTAGTGCTCAAACT
GCTACCACCCTTTTCAATTGCTATCTTTTGAAAGGCACCACTATTTGTTTTGCTGGGGTCTCGGGTGGACCCTTA
TTCGCTCCGACAAGATGAAACAATCATGAACCAGGAAAAAACTCGCCAAACTGCAGGCACAAGTGCGCATTG
GTGGGAAAGGAACTGCTCGCAGAAAGAAGAAGATCATGAACCAGGAAAAAACTCAGCCACAGCAGATGACAAAAAAACTTCAGT
TCTCCTTAAAGAAGTTAGGGGTAAACAATATCTCTGGTATTGAAGAGGTGAATATGTTTACAAACCAAGGAACAG
TGATCCACTTTAACAACCCTAAAGTTCAGGCATCTTGGCAGCGAACACTTTCACCATTACAGGCCATGCTGAGA
CGAAGCAGCTGACAGAAATGCTACCCAGCATCTTAAACCAGCTTGGTGCGGATAGTCTGACTAGTTTAAGGAGAC
TGGCCGAAGCTCTCGCCCAAACAATCTGTGGATGGAAAAAGCACCACTTGCTACTGGAGAGAGTGATGATGATGAAG
TTCCAGATCTTGTGGAGAAATTTTGATGAGGGCTTCCAAGAATGAGGCAAACTGAATTTGATGATCTG
AAAACCTGAAGAAGTTACTGGGAGCTGCTATTTTATATTATGACTGCTTTTTAAGAAATTCTTGTTTATGGATCTG
ATAAAATCTAGATCTCTAATATTTTTAAGCCCAAGCCCCTTGGACACTGCAGCTCTTTTCAGTTTTTTGCTTATAC
ACAATTCATTCTTTGCAGCTAATTAAGCCCGAAGAAGCCCTTAAGTGGGAATTC

PCT/US2003/028547

1753/6881 FIGURE 1625

 ${\tt MKETIMNQEKLAKLQAQVRIGGKGTARRKKKVVHRTATADDKKLQFSLKKLGVNNISGIEEVNMFTNQGTVIHFN} \\ {\tt NPKVQASLAANTFTITGHAETKQLTEMLPSILNQLGADSLTSLRRLAEALPKQSVDGKAPLATGEDDDDEVPDLV} \\ {\tt ENFDEASKNEAN} \\$

PCT/US2003/028547

1754/6881 FIGURE 1626A

CGAGCGCACAGCCCGCCTCCTTCCGCGGCGCCTGCAGTGGCAGGCTTGCTCTGCCCTACCGTGACGCGCTCCGGA GACGCTCTGCGGGTCCTGGACACCGGGTCCGCGGCGTGGGGACGACAGACGGAGGCGAACGCCATCGGTAGCCGG TCCGCGAGCCATCGTTCGGGGCGCAGTCCTCTCCCCGGCTGGCCCTCCTTTCTCCGGGGCATTCGCCACCGCTTC CCTGGGCTGAGACGACCGGTTCGTCGCCTCCTTGCCCGTGACCGTCGCTAGAACTCAGTTGTGCGTTGCGGCCAG TCGCCACTGCTGAGTGGAAACAAAATGTCAGTCAGTGTGCATGAGAACCGCAAGTCCAGGGCCAGCAGCGCTCC AGTCGCTACTTTGAGGCCATGTTCAGTGGTGGCCTGAAAGAGAGCCAGGACAGTGAGGTCAACTTTGACAATTCC ATCCACCCAGAAGTCTTGGAGCTGCTTGACTATGCGTACTCCTCCCGGGTCATCATCAATGAAGAAAATGCA GAATCGCTCCTGGAAGCTGGTGACATGCTGGAGTTTCAAGACATCCGGGATGCATGTGCAGAGTTCCTGGAAAAG AACCTGCATCCCACCAACTGCCTGGGCATGCTGCTGCTGTCTGATGCACCAGTGCACCAAGCTGTACGAACTA TCTTGGAGAATGTGTCTCAGCAACTTCCAAACCATCAGGAAGAATGAAGATTTCCTCCAGCTGCCCCAGGACATG GTAGTGCAACTCTTGTCCAGTGAAGAGCTGGAGACAGAGGATGAAAGGCTTGTGTACGAGTCTGCAATTAACTGG ATCAGCTATGACCTGAAGAAGCGCTATTGCTACCTCCCAGAACTGTTGCAGACAGTAAGGCTGGCACTTCTGCCA GCCATCTATCTCATGGAGAATGTGGCCATGGAGGAACTCATCACCAAGCAGAGAAAGAGTAAGGAAATTGTGGAA GAGGCCATCAGGTGCAAACTGAAAATCCTGCAGAATGACGGTGTGGTAACCAGCCTCTGTGCCCGACCTCGGAAA ACTGGCCATGCCCTCTTCCTGGGAGGACAGACTTTCATGTGTGACAAGTTGTATCTGGTAGACCAGAAGGCC AAAGAAATCATTCCCAAGGCTGACATTCCCAGCCCAAGAAAAGAGTTTAGTGCATGTGCGATTGGCTGCAAAGTG TACATTACTGGGGGGGGGGGTCTGAAAATGGGGTCTCAAAAGATGTCTGGGTTTATGATACCCTGCACGAGGAG TGGTCCAAGGCTGCCCCCATGCTGGTGGCCAGGTTTGGCCATGGCTCTGCTGAACTGAAGCACTGCCTGTATGTG GTTGGGGGGCACACGGCCGCAACTGGCTGCCTCCCGGCCTCCCCCTCAGTCTCTCTAAAGCAGGTAGAACATTAT TGTGAAAACAGGTGGACTGTACCGGCCACCTGTCCCCAGCCCTGGCGTTACACAGCAGCAGCTGTGCTGGGGAAC GTTGGAGGATACTTTGGCATTCAGCGATGCAAGACTTTGGACTGCTACGATCCAACATTAGACGTGTGGAACAGC ATCACCACTGTCCCGTACTCGCTGATTCCTACTGCATTTGTCAGCACCTGGAAACATCTGCCTTCTTAAATGCAG TACATTCTAAAGAGAGTGAGCATGAGCTCACTCCATCACTCGATGAGATAATATGAGATTTCTACTTCGGAGAGG CCAAGTCTAATGAAGAGAAAAAAAGGAAAAGGAAGTTGCAAGACTCGAATAAAATCTGCTGCACCTTGTAAATGCT AATGAACAAACCTGTGATCTAGTCCTTGTCTTGTAATTGTGGATTAATGTĆAATGTTAATCAGCCCCTCAAAGGG AGAGAAAAGCTGGACCTTTTCCCTTGCTGTACCATATTCAGCATTTGATTTCCATGGGCCCCACCATTTATGTGT AGAATTTGAAATGGTTGTCACCTCTCTGAGGACAGAGCTTGAAGCCTCCACACCAGCTGCTGGAGATTCA AAGCCCAACTGTGGGTCCGAGAGGGAAGCTGGCTGGGCTGAAGAATGAAGACCACTGGACTCTCCGTTAAT CTCTAAGGGGTCTGCTCCCCAGGAACGTTTCTGAACAATGGGGACTTTGTTGGTAGCCATTTGGTAGATGTTCTT ATGCCTGCATGCTGAAACAATGCCTACAGCTGTCTTCACATGTATGGACGTGTGTAATGGTTGTACGTTTTGCA CATTTTGTGGCTGTTGAGATGTGCTTTGCTGCACAAACATGAAAATTTTTGAGTTACAATTTGGAGCATAACTGG AGGGTGGGTTGGGGAGGGTGGATTTTTAAAATGTCAAGACAGGGAAGGATGACAAAATGGAAATTTAAATGACA TCCTAGAGGTAGAGAAACCGTGGAGATCGCTTTTCTCAGACTCACCAACTTTTAATGGGATTTCATGGGGTTTGG TTGTGCTGATAGGGTAAGGGGAGGCTGCTTTCTGCCCTTCTCCCCACTCCCATCTGATTTACTTAATTCAGTCTC AGAATGCTTTGCCATAACCACATTTAATGGGAAAAACGGCAGTATCACAGATGTAAATTAACTCACCAGATTTAC TGGGCCTGAACTCATTCTCTTCTTGCTATATGATTTAGCAAGTTCTAGAAGGTCTCCAAGACAATAATTACATTG GCACAATGTATACTTCAGTGCTCACCCGTAGGCAAATCTCTTTTTAAAAAACTCTTTGGTGCACAAGTAACACAT

PCT/US2003/028547

1755/6881 FIGURE 1626B

TTGGCCACAAAACACCAAAGAATTGTAGGCAGTGGCCCCTATTGAGAAGTTTTCCGGTAGAGTTTGGAAATCAGTT GTGAATACATTCTTTGCTAGTTGGAGTGCTTGTTTACTAAGCATGTGCCGTCGTAGGTATTAGTGCTAGTCTCAG ATAGGTGCTTCCCCTGAGGTGCAGGGGAAGACCAAAGTTTGCAACTCGAACTGCTTTCGTCCATGTTTCTCACAT TGCTGTATTTTAGAAAATAGGGGTTAAGACTGATAACAACCTTTTACATTGTGACTGTGTTTTGCATTGTCTAATG TGGTTCCTAGATGTGTTCTAAGCAATGCCAAATGTCTAATTGTCCCCCAGTGGGCATAGTCAGTGTCGTTTATATT CCAGAGGGAGCTGTGGTAAGGGTTGGGCCCCCAGCCTGTAGGGAACTTTCTGGACTCCCACTCTTTGAATCGATA TAGGCATTTGGTCTCACTACTTGACCATTCTCACCCTGTGAAACGTCCCACACTTTGAAGCAAATACAATTCACA GCACAGTACACAAAAACCTTGGCATAAGACAGAGAAGGTTCTTCTTATTTTGTGGGCTGGTTGCTGTAGAAAC ACATAACAAAGGGCAGCCCTCCACTTCTGGTATAATTGTGTAGCCCCTTTTCTTTGGGCTTGACACCTGTCTTGA ATAAGAGTGATTAGAGCTGCATAATGTCCCTCTCTTGGCTATTGACCATGTGGTTCACGTACAAAACTCTGTATA AGTTGAAGGAAAATGTTCATGTTCATATGTACTTGTTTGCTATGACTACATTTTGAGGTTTTGTAAAACTGTTAT TTTTTTTTTTCACAATGTGAAACTGAAGGTCAATAAATTATTAGAGATTTTCTCTTC

PCT/US2003/028547

1756/6881 FIGURE 1627

CTGATCCGGGCCGGGCAAGTCGGGTCCCGAGGCTCCGGCTCGGCAGACCGGCGGAAAGCAGCCGAGCGGCC **ATG**GAGCTGTGCGGGCTGCCCCGGCCCCATGCTGCTGCTGCTGTTGGCGACACTGCTGGCGCG ATGTTGGCGCTGCTGACTCAGGTGGCGCTGGTGGTGCCAGGTGGCGGAGGCGGCTCGGGCCCCGAGCGTCTCGGCC AAGCCGGGGCCGCCTGTGGCCCCTGCCGCTCTCGGTGAAGATGACCCCGAACCTGCTGCATCTCGCCCCGGAG AACTTCTACATCAGCCACAGCCCCAATTCCACGGCGGGCCCCTCCTGCACCCTGCTGGAGGAAGCGTTTCGACGA TATCATGGCTATATTTTTGGTTTCTACAAGTGGCATCATGAACCTGCTGAATTCCAGGCTAAAACCCAGGTTCAG CAACTTCTTGTCTCAATCACCCTTCAGTCAGAGTGTGATGCTTTCCCCAACATATCTTCAGATGAGTCTTATACT TTACTTGTGAAAGAACCAGTGGCTGTCCTTAAGGCCAACAGAGTTTGGGGAGCATTACGAGGTTTAGAGACCTTT AGCCAGTTAGTTTATCAAGATTCTTATGGAACTTTCACCATCAATGAATCCACCATTATTGATTCTCCAAGGTTT TCTCACAGAGGAATTTTGATTGATACATCCAGACATTATCTGCCAGTTAAGATTATTCTTAAAACTCTGGATGCC ATGGCTTTTAATAAGTTTAATGTTCTTCACTGGCACATAGTTGATGACCAGTCTTTCCCATATCAGAGCATCACT TTTCCTGAGTTAAGCAATAAAGGAAGCTATTCTTTGTCTCATGTTTATACACCAAATGATGTCCGTATGGTGATT GAATATGCCAGATTACGAGGAATTCGAGTCCTGCCAGAATTTGATACCCCTGGGCATACACTATCTTGGGGAAAA GGTCAGAAAGACCTCCTGACTCCATGTTACAGTAGACAAAACAAGTTGGACTCTTTTGGACCTATAAACCCTACT TTGGGAGGAGATGAAGTGGAATTTAAATGTTGGGAATCAAATCCAAAAATTCAAGATTTCATGAGGCAAAAAGGC TTTGGCACAGATTTTAAGAAACTAGAATCTTTCTACATTCAAAAGGTTTTTGGATATTATTGCAACCATAAACAAG GGATCCATTGTCTGGCAGGAGGTTTTTGATGATAAAGCAAAGCTTGCGCCGGGCACAATAGTTGAAGTATGGAAA GACAGCGCATATCCTGAGGAACTCAGTAGAGTCACAGCATCTGGCTTCCCTGTAATCCTTTCTGCTCCTTGGTAC TTAGATTTGATTAGCTATGGACAAGATTGGAGGAAATACTATAAAGTGGAACCTCTTGATTTTGGCGGTACTCAG AAACAGAAACAACTTTTCATTGGTGGAGAAGCTTGTCTATGGGGAGAATATGTGGATGCAACTAACCTCACTCCA AGATTATGGCCTCGGGCAAGTGCTGTTGGTGAGAGACTCTGGAGTTCCAAAGATGTCAGAGATATGGATGACGCC TATGACAGACTGACAAGGCACCGCTGCAGGATGGTCGAACGTGGAATAGCTGCACAACCTCTTTATGCTGGATAT TGTAACCATGAGAACATGTAAAAAATGGAGGGGAAAAAGGCCACAGCAATCTGTACTACAATCAACTTTATTTTG

PCT/US2003/028547

1757/6881 FIGURE 1628

MELCGLGLPRPPMLLALLLATLLAAMLALLTQVALVVQVAEAARAPSVSAKPGPALWPLPLSVKMTPNLLHLAPE
NFYISHSPNSTAGPSCTLLEEAFRRYHGYIFGFYKWHHEPAEFQAKTQVQQLLVSITLQSECDAFPNISSDESYT
LLVKEPVAVLKANRVWGALRGLETFSQLVYQDSYGTFTINESTIIDSPRFSHRGILIDTSRHYLPVKIILKTLDA
MAFNKFNVLHWHIVDDQSFPYQSITFPELSNKGSYSLSHVYTPNDVRMVIEYARLRGIRVLPEFDTPGHTLSWGK
GQKDLLTPCYSRQNKLDSFGPINPTLNTTYSFLTTFFKEISEVFPDQFIHLGGDEVEFKCWESNPKIQDFMRQKG
FGTDFKKLESFYIQKVLDIIATINKGSIVWQEVFDDKAKLAPGTIVEVWKDSAYPEELSRVTASGFPVILSAPWY
LDLISYGQDWRKYYKVEPLDFGGTQKQKQLFIGGEACLWGEYVDATNLTPRLWPRASAVGERLWSSKDVRDMDDA
YDRLTRHRCRMVERGIAAQPLYAGYCNHENM

PCT/US2003/028547

1758/6881 FIGURE 1629

PCT/US2003/028547

1759/6881 FIGURE 1630

MEEDEFIGEKTFQRYCAEFIKHSQQIGDSWEWRPSKDCSDGYMCKIHFQIKNGSVMSHLGASTHGQTCLPMEEAF ELPLDDCEVIETAAASEVIKYEYHVLYSCSYQVPVLYFRASFLDGRPLTLKDIWEGVHECYKMRLLQGPWDTITQ QEHPILGQPFFVLHPCKTNEFMTPVLKNSQKINKNVNYITSWLSIVGPVVGLNLPLSYAKATSQDERNVP

PCT/US2003/028547

FIGURE 1631

PCT/US2003/028547

1761/6881 FIGURE 1632

CTCTTTCGCTCAGGCCCGTGGCGCCGACAGG<u>ATG</u>GGCAAGTGTCGTGGACTTCGTACTGCTAGGAAGCTCCGTAG
TCACCGACGAGACCAGAAGTGGCATGATAAACAGTATAAGAAAGCTCATTTGGGCACAGCCCTAAAGGCCAACCC
TTTTGGAGGTGCTTCTCATGCAAAAGGAATCGTGCTGGAAAAAGTAGGAGTTGAAGCCAAACAGCCAAATTCTGC
CATTAGGAAGTGTGTAAGGGTCCAGCTGATCAAGAATGGCAAGAAAATCACAGCCTTTGTACCCAATGACGGTTG
CTTGAACTTTATTGAGGAAAATGATGAAGTTCTGGTTGCTGGATTTGGTCGCAAAGGTCATGCTGTTGGTGATAT
TCCTGGAGTCCGCTTTAAGGTTGTCAAAGTAGCCAATGTTTCTCTTTTGGCCCTATACAAAGGCAAGAAGGAAAG
ACCAAGATCA<u>TAA</u>ATATTAATGGTGAAAACACTGTAGTAATAAATTTTCATATGCC

PCT/US2003/028547

1762/6881 FIGURE 1633

 ${\tt MGKCRGLRTARKLRSHRRDQKWHDKQYKKAHLGTALKANPFGGASHAKGIVLEKVGVEAKQPNSAIRKCVRVQLIKNGKKITAFVPNDGCLNFIEENDEVLVAGFGRKGHAVGDIPGVRFKVVKVANVSLLALYKGKKERPRS$

PCT/US2003/028547

1763/6881 FIGURE 1634

TTTATTTTAATTGCCGTAAAGGAACTGTATTTTTGTTTTGTTTTTAACACAGCACTTTAAATCCAGTTTGTGTT TTGTCAACTTGAACTGGAATCTCTTTTGTTACTTTGGAGGTGATAAATAGTTTTCAAATCTGCTGATTTGTATAC TGTGGCACAAGTATCTTTGAACTTTGATAGTGAAAGGAGACCTTCAACAATTTTTAGTCTAGGCGAGAGGAATAT TAGGAATGTGACTTCTAAATTTTACAATAGAGCAGTTATTTTAAGGTCATGGTTAACATTTCTTAAGGTTCAACT AAAATTCAGTTAAAATTTCAGAGCTACGAGGAACTTAAATCTTAGCTAAAAATTACCTGTTGTAGATAGTATTAA TATTTCTAGATTAATAGGCTAGTAGTTATTTCTGCAGAAACAACGTATGGAACTGAAAGCCACCTATTTTTATTT TAGACTAATTTAAACCACTTGGAATGGATTCTAGGAAACATCTTAAGCTTGTGTGTTGCCTGTGGTGGTTTTTTG TTTGGTTTTGGTTTTATATTTTTTGGCATGTCTATGGCAGTTAAAAGTGGTATATTTTGCTTTAGATAGGGAATCA GGTTATAATCATTGTTCTTCCTCTAAACTGCCTCTTGGGCTTTACATCAGGTCAAGGATTTTTAGGGTTTCTCAA AAATAGGATTCTTGTCAGTGTATGCATGCTGAGTAAGTCACCTTTCTGGCTCTAATTTCTGGGTGGCCATCTGTT GTCCAGCTCTGCCCAACTGGACTTTCCGAAAGCCATGTCAACTAATTTTTTATATGCTAAGACAAATCGAATA AAAGGAAGAGATAATTTTGGGGGAAAATTTGTGGAAACATACAAAACGTTTTGCTTTGTATAGATGCTAAACAGA GTGGGAGGCAGCATATTTGTAACAACCACCATTCTGACCTTTTGAAACACAAGCTTTTGGAGAAGTCAGGGAGAG ACACAGTATGAATAAAAGCAATTAACATTTTCTTTAATGTATATTTTTCAAAGAGGACCACGGAATCCTGTTCTC TAACCCAAGGGGCAGTGTAGGTGGTTTTAAGCCCACAGAATATTGAGATATTTCTCTTGTGGTTTTGGTGGGGTG GTGGGATGCAGAAGGTTATTAAAGATCAATTTAAGCATCAGATAGACTATCCCTTTTATTTTTTAACTTTTAGG TTCAGGGGTACATGTGCAGGTTGTTATATAGGTAAACTCATGTCAAGTGGTTTTGTTGTACAGATTATTTTGTCA GGCCCCAGTGTCTTGTTCCTTTCTTTGTGTCCTTGAGTTCTCATCATTTAGCTCCTACTTCTAAATGAGAACA TGTATTTGGTTTTCTGTTCTGTTTAGTTTGCTAAGGATAATGGCCTCCAGCTCAGATGGAATATCTCTATCATA TAGACCTGTTGTTACAGGGCAGGATCGGATGATGGACACTGAAGTCCTCAGCTTGCTAAGTTCAGTTGCTCCCC TAGCCTCCTTTTGGCTTCAGAGTCTTTTGATTCCATCTATCCTGGTATTTTTTGTGTGCTGATGTTTAGTTCTGG GAGTCTGAATCCCTTCTGTGGCTTAAATAATTTGAGGATCAAGTCCAGTGTCTTGTTAATCCCTGTTCTACTGTG CCAGACACTATCTTGAATGCTTTTATATGTTCAGGTTCAAAATCGCTCTTTCATACCAGGGGATGATAGTAACGT GTAACTTGCAATAGATTCCTTCATCTTAGTAATAAGATGATCAGTCTAGTTAGGACAAAATAGAGATTGAATAAA TTAACTTTTCCAAGTTTACAGAGTAAAAATGAGCAGATCTCTGCCTGGTTTTGTGAAAAAAGAGTTAGCACTGGTA AATAGAATATTTCTACTCCTACACCATTCTTTCAGTATATCATCACTGAAGACAGGAAGATAGGCACACAGATTC TTATTCAGATAATCCCAGGATTCTAGAAGAAAATAAAGAAGAGTGACAGTTCAGTTAGGGTGTGAACTTCCAGAG GAGCACTGCTTAAGCTGAACTTGAGAGCATTGTGCAAAAGCACAGTAGTCTGTTAAGAACTAGAAATAACCTAGC TTGTGCCACTTCGGGAGTATTAAGACATAAGCCTAGAAAGGTAGGCAAAGGTTAGATCTTAGACTGTCTTGTATT TTTCTCATTCCTGTTGATTACCTACCTCAAAATTGAATATGTTTTTCCTCCTGCCTAACACAAAACTACTCAAGG GCAGAAATTTAAATTCTTCCTTGGTGTATGTGCAAAGAAGGTTGAATATATTCATGCCTACCTTATTTTGGACTA GGAATACAGTAGTATACTTTCCGAAGACTTGCCTGAATAGTATATAAGGTGGAGGCAACTGACTAGTTAGGTCAG TATTTTTAGAAACTCTTAATAGCTCATACTCTTGATACCAAAAGCAGCCCTGATTGTTAAAGCACACACCTGCAC TTTGCAAAGCCTTTGAGAAGTTACTGGATCATAGGAAGCTTATAACAAGAATGGAAGATTCTTAAATAACTCACT TTCTTTGGTATCCAGTAACAGTAGATGTTCAAAATATGTAGCTGATTAATACCAGCATTGTGAACGCTGTACAAC CTTCCATGACTTTTACTTTGCCCTAAGCTAATCTCCAAAATCTGAAATGCTACTCCAATATCAGAAAAAAAGGGG GAGGTGGAATTATATTTCCTGTGATTTTAAGAGTACAGAGAATCATGCACATCTCTGATTAGTTCATATATGTCT AGTGTGTAATAAAAGTCAAGATGAACTCTC

PCT/US2003/028547

1764/6881 FIGURE 1635

 ${\tt MASSSDGISLSYRPVVTGQDRMMDTEVLSLLSSVALPSLLLASESFDSIYPGIFCVLMFSSGLASAVLIGRALSF} \\ {\tt QAILKGGQSKGQSLNPFCGLNNLRIKSSVLLIPVLLCQTLS} \\$

PCT/US2003/028547

1765/6881 FIGURE 1636

CGGGATTTAGATCACGTCCCGCAGGCCGGCAAGTAGCTGATACTCTCATTGGTTGCAAAACCTTGATCTGTGA ${\tt AAGCGGGCGTTTTGGAAGATACCGGAAGTAGAGTCACGGAGGGGTATTAAGAA} {\tt ATG} {\tt GAGAGAAAAATAAGCAGAA}$ TCCACCTTGTTTCTGAACCCAGTATAACTCATTTTCTACAAGTATCTTGGGAGAAAACACTGGAATCTGGTTTTG TTATTACACTTACTGATGGTCATTCAGCATGGACTGGGACAGTTTCTGAATCAGAGATTTCCCAAGAAGCTGATG ACATGGCAATGGAAAAAGGGAAATATGTTGGTGAACTGAGAAAAGCATTGTTGTCAGGAGCAGGACCAGCTGATG TATACACGTTTAATTTTTCTAAAGAGTCTTGTTATTTCTTCTTTGAGAAAAACCTGAAAGATGTCTCATTCAGAC TTGGTTCCTTCAACCTAGAGAAAGTTGAAAACCCAGCTGAAGTCATTAGAGAACTTATTTGTTATTGCTTGGACA TTCAAGGACGATTTGAAAAATGTGTGAGTGCTAAGGAAGCTTTGGAGACTGATCTTTATAAGCGGTTTATTCTGG TGTTGAATGAGAAGAAAACAAAAATCAGAAGTTTGCATAATAAATTATTAAATGCAGCTCAAGAACGAGAAAAGG ACATCAAACAAGAAGGGGAAACTGCAATCTGTTCTGAAATGACTGCTGACCGAGATCCAGTCTATGATGAGAGTA TTTCAAGTCTTGATGTCACTGATATTGCACCAAGTAGAAAAAGGAGACAGCGAATGCAAAGAAATCTTGGGACAG AACCTAAAATGGCTCCTCAGGAGAATCAGCTTCAAGAAAAGGAAAAGCCTGATTCTTCACTACCTGAGACGTCGA AAAAGGAGCACATCTCAGCTGAAAACATGTCTTTAGAAACTCTGAGAAACAGCAGCCCAGAAGACCTCTTTGATG $\mathtt{AGATT} \underline{\mathtt{TAA}}\mathtt{CAGTCTCAAAAAATACTTTGATGTTCACTAGACTATGTTTTCTATTCATTTCTTTAAAATGAAAAAG$ GCAAAATGGATTACACATGTATACAAAGATACGATTTGATGATGACACTGGCACATTGAGTTCTAAACTATTCAT ATATTATATGTGATAGCTGTCCAACATCCTGTCTGGGAAGATTTTGAAAACAGGACAAAGAAAACATCATTTTAA AATGTCTTCAGCTTTTTTTGAATAGACGTATTCAAACATATTCTGAACATTGATGTTTGAACATTTTAATTTGTG TGATGATGTAGAAAATATAATTTTAGTTTGTACATAAACATTGTGAAAAATCTGATAATAAAATTTTTGATACATT GAAAAAAAAA

PCT/US2003/028547

1766/6881 FIGURE 1637

MERKISRIHLVSEPSITHFLQVSWEKTLESGFVITLTDGHSAWTGTVSESEISQEADDMAMEKGKYVGELRKALL SGAGPADVYTFNFSKESCYFFFEKNLKDVSFRLGSFNLEKVENPAEVIRELICYCLDTIAENQAKNEHLQKENER LLRDWNDVQGRFEKCVSAKEALETDLYKRFILVLNEKKTKIRSLHNKLLNAAQEREKDIKQEGETAICSEMTADR DPVYDESTDEESENQTDLSGLASAAVSKDDSIISSLDVTDIAPSRKRRQRMQRNLGTEPKMAPQENQLQEKEKPD SSLPETSKKEHISAENMSLETLRNSSPEDLFDEI

PCT/US2003/028547

1767/6881 FIGURE 1638

CGGGATTTAGATCACGTCCCGCAGGCCGGCAGAGTAGCTGATACTCTCATTGGTTGCAAAACCTTGATCTGTGA TAACAAAAATCTGAGGTATTAAGAAATGGAGAGAAAAATAAGCAGAATCCACCTTGTTTCTGAACCCAGTATAAC TCATTTTCTACAAGTATCTTGGGAGAAAACACTGGAATCTGGTTTTGTTATTACACTTACTGATGGTCATTCAGC ATGGACTGGGACAGTTTCTGAATCAGAGATTTCCCAAGAAGCTGATGACATGGCAATGGAAAAAGGGAAATATGT TGGTGAACTGAGAAAAGCATTGTTGTCAGGAGCAGGACCAGCTGATGTATACACGTTTAATTTTTCTAAAGAGTC TTGTTATTTCTTCTTTGAGAAAAACCTGAAAGATGTCTCATTCAGACTTGGTTCCTTCAACCTAGAGAAAGTTGA AAACCCAGCTGAAGTCATTAGAGAACTTATTTGTTATTGCTTGGACACCATTGCAGAAAAATCAAGCCAAAAATGA GCACCTGCAGAAAGAAATGAAAGGCTTCTGAGAGATTGGAATGATGTTCAAGGACGATTTGAAAAATGTGTGAG TGCTAAGGAAGCTTTGGAGACTGATCTTTATAAGCGGTTTATTCTGGTGTTGAATGAGAAGAAAAACAAAAATCAG AAGTTTGCATAATAAATTATTAAATGCAGCTCAAGAACGAGAAAAGGACATCAAACAAGAAGGGGAAACTGCAAT CTGTTCTGAAATGACTGCTGACCGAGATCCAGTCTATGATGAGGAGTACTGATGAGGAAAGTGAAAACCAAACTGA TCTCTCTGGGTTGGCTTCAGCTGCTGTAAGTAAAGATGATTCCATTATTTCAAGTCTTGATGTCACTGATATTGC ACCAAGTAGAAAAAGGAGACAGCGAATGCAAAGAAATCTTGGGACAGAACCTAAAATGGCTCCTCAGGAGAATCA GCTTCAAGAAAAGGAAAAGCCTGATTCTTCACTACCTGAGACGTCGAAAAAAGGAGCACATCTCAGCTGAAAAACAT GTCTTTAGAAACTCTGAGAAACAGCAGCCCAGAAGACCTCTTTGATGAGATT<u>TAA</u>CAGTCTCAAAAAATACTTTG ATGTTCACTAGACTATGTTTTCTATTCATTTCTTTAAAATGAAAAGGAGAATTTCAAGTCAGCAGCCGCTATTA CCGTATCTTACAATTTAATTACATACACAGTGAATTGAAACCATTGTGCAAAATGGATTACACATGTATACAAAG CTGTCTGGGAAGATTTTGAAAACAGGACAAAGAAAACATCATTTTAAAATGTCTTCAGCTTTTTTTGAATAGACG TATTCAAACATATTCTGAACATTGATGTTTGAACATTTTAATTTGTGTGATGATGTAGAAAATATAATTTTAGTT TGTACATAAACATTGTGAAAATCTGATAATAAAATT1TTGATACATTGAAAAAAAAA

PCT/US2003/028547

1768/6881 FIGURE 1639

MERKISRIHLVSEPSITHFLQVSWEKTLESGFVITLTDGHSAWTGTVSESEISQEADDMAMEKGKYVGELRKALL SGAGPADVYTFNFSKESCYFFFEKNLKDVSFRLGSFNLEKVENPAEVIRELICYCLDTIAENQAKNEHLQKENER LLRDWNDVQGRFEKCVSAKEALETDLYKRFILVLNEKKTKIRSLHNKLLNAAQEREKDIKQEGETAICSEMTADR DPVYDESTDEESENQTDLSGLASAAVSKDDSIISSLDVTDIAPSRKRRQRMQRNLGTEPKMAPQENQLQEKEKPD SSLPETSKKEHISAENMSLETLRNSSPEDLFDEI

WO 2004/030615 PCT/US2003/028547

FIGURE 1640

AGGTAAACAGAATCTGGTGATTATGGGTAAGAAGACCTGGTTCTCCATTCCTGAGAAGAATCGACCTTTAAAGGG TGATGCCTTAAAACTTACTGAACAACCAGAATTAGCAAATAAAGTAGACATGGTCTGGATAGTTGGTGGCAGTTC TGTTTATAAGGAAGCCATGAATCACCCAGGCCATCTTAAACTATTTGTGACAAGGATCATGCAAGACTTTGAAAG TGACACGTTTTTTCCAGAAATTGATTTGGAGAAATATAAACTTCTGCCAGAATACCCAGGTGTTCTCTCTGATGT CCAGGAGGAGAAGGCATTAAGTACAAATTTGAAGTATATGAGAAGAATGATTAATATGAAGGTGTTTTCTAGTT TAAGTTGTTCCCCCTCCGCTCTGAAAAAAGTATGTATTTTTACATTAGAAAAGGTTTTTTGTTGACTTTAGATCTA TAATTATTTCTAAGCAACTAGTTTTTATTCCCCACTACTCTTGTCTCTATCAGATACCATTTATGAGACATTCTT GCTATAACTAAGTGCTTCTCCAAGACCCCAACTGAGTCCCCAGCACCTGCTACAGTGAGCTGCCATTCCACACCC GATCCACATACCCTTCAACTGAGCAGTTTCACTAGTGGAAATACCAAAAGCTTCCTACGTGTATATCCAGAGGTT TGTAGATAAATGTTGCCACCTTGTTTGTAACAGTGAAAAATTGAAAACAACCTGGAAGTCCAGTGATGGGAAAAT GAGTATGTTTCTGTCTTAGATTGGGGAACCCAAAGCAGATTGCAAGACTGAAATTTCAGTGAAAGCAGTGTATTT GCTAGGTCATACCAGAAATCATCAATTGAGGTACGGAGAAACTGAACTGAGAAGGTAAGAAAAGCAATTTAAAGT CAGCGAGCAGGTTCTCATTGATAACAAGCTCCATACTGCTGAGATACAGGGAAATGGAGGGGGGAAAGCTGGAGT ATTGATCCCGCCCCCTCCTTGGTTGTCAGCTCCCTGTCCTGTGTGGGGGGGAACATAGTCCAGCTGCTCTATA GCAAGTCTCAGGTGTTTGCAGTAAGAAGCTGCTGGCATGCACGGGAACAGTGAATGCCAAACACTTAAAGCAATT CGATGTTTAAGTATGTAAGTTCTTTTTTTTTAGACAGCGTTTCGCTCTTGTTGCCCAGGCTAGCAATGGT GTGACCTCGGCTTACTGCAACCTCCGCCTTCCCAGATTCAAGCGATTCTCCTGCCTCAGGCTCCCAAGTAGCTAG GACCAGGTGCGCGCCACCACGCCGGCTAATTTTTGTATTTTTTATTTTTAGTAGAGATGGGGTTTCACCATGTT TTGAGCCACCACCCGGCACATCTTCATTCTTTTTATGTAGTAAAAAGTATAAGGCCACACATGGTTTATTTGA AGTATTTTATAATTTAAAAAAATACAGAAGCAGGAAAACCAATTATAAGTTCAAGTGAGGGATGATGGTTGCTTG AACCAAAGGGTTGCATGTAGTAAGAAATTGTGATTTAAGATATATTTTAAAGTTATAAGTAGCAGGATATTCTGA TGAGACCAGCTTGGGCAACATGGCAAAGCCCCATCTCTACAAAAAACACAAAAATTAGCTGGGCATTGTGGCGCA TCGTGATTGTGCCACTGCACTCCAGCCGGGGTGACAGAAGAGCCTTGTCTCGAAAAGGAATCTGAAAACAATGG AACCATGCCTTCATAATTCTAGAAAGTTATTTTCAACTGATAAATCTATATTCACCCAAATAATCAAGGGTGAAG GTAAAATAATACATTTTTAGACAAGCAAAGACTCAGGGGTTACCTCCATGTGCCCTTTTTAGGGAAGCTGTTGGA GAAAATACTCCAGCAAAATGAAGGAGTACACAAACCAGAGAATGACATGAATCCAGCAAATAGGATCCAACACAG GCAATATTCCAGCTATGGAGCTAGCTTTAAAAAGGAACAGTAAAAATATTAATCGGTTAGCTGGGTGGAATGGCC CATGCCTGTAGTCCCAGCTACTCAGGAGGCTCAGCAGGACGACTTGAGCCCAAGAGTTCCAGACCAGCCTGG CCACCTTAGTGAGATCCCTTCTCTTAAAAATAATAACTTATTGCCAGATTTGGGGCATTTGGAAAGAAGTTCATT GAAAGAAGTACAGGATAGGAAGAGCATAATACACTGTTTTTCTCAACAAGGAGCAGTATGTACACAGTCATAATG ATGTGACTGCTTAGCCCCTAAATATGGTAACTACTCTGGGACAATATGGGAGGAAAAGTGAAGATTGTGATGGTG TAAGAGCTAAATCCTCATCTGTCATATCCAGAAATCACTATATAATAATAATAATGAAATGACTAAGTTATGTG AGGAAAAAACAGAAGACATTGCTAAAAGAGTTAAAAGTCATTGCTCTGGAGAATTAGGAGGGATGGGGCAGGGG ACTGTTAGGATGCATTATAAACTGAAAAGCCTTTTTAAAATTTTATGTATTAATATATGCATTCACTTGAAAAAC TGCCTCTGGAAAGAACAACTGGCAGGACTGTTGTTTTCATTGTAAGACTTTTGGAGCCATTTAATTGTACTTAAC CATTTCATCTATTTCTTTAATAAGAACAATTCCATCTTAATAAAGAGTTACACTTGTTAATA

PCT/US2003/028547

1770/6881 FIGURE 1641

WO 2004/030615 PCT/US2003/028547

1771/6881 FIGURE 1642A

CTCCAATACCGCAGGAGGGCGGTCTTCCCCGGCTCGCCAACTCGGCTGCTCTGGGGGGATTCGTGCGCGGTAAGAA TGTCTAGGGGCGGCGACCTCAGCTGTTGGGCTCCGGCTGCTGGGGGCTGTGCGTCCAGCCGCCCTGGAATCCGCC GAAGGATAATCTACTTCCTTTTGAACAGCTTCGGTCCCCACTATGACAGTCGCATAAACTTCAGCGAAGAGTGCG CTGGTAAAGTGGCATGGAGTTTCTCACACCAATTCATTGGGTCCACCCTTCAGCTTCTGTGGAAGGGGTCTTTCT GTTACTAGGAGCTGAGACTTGGGGGGTTGCCAGGGATGCTGGTCTTAAAAGGTGATAATTTAGGCCGGGCGCGGT GGCTCACGCCTGTAATCCCAGCACTTTGGGAGGTCGAGGCGGGCAGATCTCCTGAGCTCAGGAGTTCGAGACCAC CCTGGGCAACATGGTGAAACCCCTTCTCTACTAAAATACAAAAAATTAGCTGGGCGTGGTGGCACGCGCCTGTAA TCCCAGCTATTCGGGAGGCTGAGGCCCGAGAATCGCTTGAGCCCTGGCGGCAGAGGTTGCAGTGAGCCAAGATCG CCCACTGCACTCCAGGTTGGGCTACAGAGTGAGACTCCGTCTCAACAACGACCACCAACAACAACAAAAAAAGGTGG TGGCTTAATACAGCCATGCTCCCCTTAAGAACTGGTATAGTTATGAGAAATGGTTGGGCCGTTTCGTGGTTGTGT GAACATCATAGTGTACTTGCACAAACCTACACAGCTGGGCCGTATGGGATAGCCTGTTACTCCTAGTCTACAGAC CTGTACAGTATAACTACTAAATACTGTAGGCAGTTGTAAAAGGATGGTGTGTATCTAAACACAGAAAAGATACTG TAAAAATATAGTGTAAAAGAAAACATGGTACAGCTGAATAGGGCACTTACGCATGGAGCTTGCAGGGCTGTCGGT AGCTATTAAGTGAGTCAGTGAGTGGTATGTGAGTGTGAAGGCCTACGATATTATTTAGGGTATTACTGTACACTA CTGTAGACTTTATAAATGCGGTATGCTTAGTCTAAGTTTATTAAAAATAAGGTAATAACCTTAGCTTACTGTGCT TCTCTGTCTCTCATTTTTGAGACAGAGTTTTGCTCTTGTCACCCAGGCTGGAGTGCAGTGGCGCAATCTCAGCTC ACTGCAACGTCCACCTCTTGAGTTCAAGCGATTCTCCTGCCTCAGCTTCCCAGGTGGTGCGCGCCTGTAGCTGGG ACTACAAGAGTGCGCCACCCACGCCAGCTAATTTTTGTATTTTTAGTAGAGATGGGGTTTGACCATGTTGGCCAG GATGGTCTCGATATCCTGACCTTGTGATCCACCTGGCCTTGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCC ACCATACCCGGCCCACTCTTTTGTAATAACACTTAGCTTAAAATGCTAATGTGTTGTATAGCTATATAAAAATAT ACATTGTGCCTACACCGGGTCAGGAGCATCAATATCACTCTTTTCTTCCTCCACATCTTGTCCTACTGGAAGGTT TTCAGGGGCAGTAACATGAATGGAGCTGTCATCTCCTATAATAACTGCTTTTTTCTGGAATACTTATAATTGTCT TTACCACAGACATGAGTAATGTGTTACACTACAAGTTATGAGGGCTACAAAGTCAATAGGAATTTTTCAGCTCCA TTATAATCATCTGAGACCAGTATCATGTGTGCAGTCGCTGTTGACCTAAATGTTATGTAGCATGTGACTAGCTGA TGAATCTTTGATTATGGCTGAATGTTCTCATTCATTGCAGGAAAAAAATATCCTCCAAATCACTAGGTAGTATGT AAGTGACCAAAACTTTTTTCCATTTTATGTTGGAGCCAAATCATTAGTGTTAGGATAAATTACTTCTTTATGTAT GTGCTCTAAAATGAAAAGTTATTTCTGAATATTAAAGCATATGTATTAAGAGTATAAAAACAAGATACAGATTTT GGTGTGAAATATATCTTATGATTCAAGTCATAATTTAAATAGAATTGAAGATGATGTGAAATCACTGGGCTGGAA GTAGCTTATACCTTGATTAGTAAGAGGAAGCCCGGGATCATCCTGTGATGGTAAACACTTTTATATGTTTTACTT ATAACTTTGCCAGGAAATTTCAACAAACTTCATATTAAAGGACATGATTTCTGTATACTTAGTAATCTGCTATGC AAATTGTTGCATTGAAATGGCAGACGAAGCAAGAAGATTGGGAGAAAGTAGCTGTGGGACTTGGAGATAGGAAAA GAAATAATTTGGTTTCTTAAGATAGTTTTTCAATTTTAAGCACACCTTTTTTAACTGGTGTGGCAGCTTTTCTGG TAAGTGGTAGATTTATGTTAGAAGCATGTCTATGCAGCATATTATAGCATTAAATATGTATACAGATATCTAACT GAAATAAAAAGTGTTTTAATAATTAAAAGTTTAACATATGGGCATATGTGACATATAGTGATATAGCATGTCTCT TTAGTTTTGTTGTTGTTGATGGCTAACCACCCATGCTTGTCTTAAAAATTGATAAGGTACCACTGATGA AATT<u>ATG</u>ACCAGGTGGGCCCGAGTTAGTACCACATATAACAAGAGACCCTTGCCTGCAACATCATGGGAGGACAT GAAGAAGGGATCCTTTGAGGGAACAAGCCAAAACCTACCAAAGCGTAAACAACTTGAAGCCAATAGGCTATCCCT CAAAAATGATGCACCCCAAGCAAAACATAAAAAGAACAAAAAGAAAAAAAGAGTACTTAAATGAAGATGTGAATGG GAAAAATGCAATGGTGTTTCCATTGTAGAAAACCTGGTCATGGAATTGCAGATTGCCCCGCCGCCCTTGAAAA

PCT/US2003/028547

1772/6881 FIGURE 1642B

PCT/US2003/028547

1773/6881 FIGURE 1643

MTRWARVSTTYNKRPLPATSWEDMKKGSFEGTSQNLPKRKQLEANRLSLKNDAPQAKHKKNKKKKEYLNEDVNGF MEYLRQNSQMVHNGQIIATDSEEVREEIAVALKKDSRREGRRLKRQAAKKNAMVCFHCRKPGHGIADCPAALENQ DMGTGICYRCGSTEHEITKCKAKVDPALGEFPFAKCFVCGEMGHLSRSCPDNPKGLYADGGGCKLCGSVEHLKKD CPESQNSERMVTVGRWAKGMSADYEEILDVPKPQKPKTKIPKVVNF

PCT/US2003/028547

1774/6881 FIGURE 1644

GGGGAGGCTGTGATGGGTTGACAGGTGCGTGACAGTGGGAGCTGCTCTCGGCACAAGC<u>ATG</u>TACGGCAAAGGCAA GAGTAACAGCAGCGCCGTCCCGACAGCCAGGCCCGGGAGAAGTTAGCACTCTACGTATATGAATATCTGCT CCATGTAGGAGCTCAGAAATCAGCTCAAACATTTTTATCAGAGATAAGATGGGAAAAAAACATCACATTGGGGGA ACCACCAGGATTCTTACATTCTTGGTGGTGTGTATTTTGGGATCTCTACTGTGCAGCTCCAGAGAGACGTGAAAC ATGTGAACACTCAAGTGAAGCAAAAGCCTTCCATGATTACAGTGCTGCAGCAGCTCCCAGTCCAGTGCTAGGAAA CATTCCCCCAGGAGATGGCATGCCAGTAGGTCCTGTACCACCAGGGTTCTTTCAGCCTTTTATGTCACCTCGGTA CCCTGGAGGTCCAAGGCCCCCATTGAGGATACCTAATCAGGCACTTGGAGGTGTCCCAGGAAGTCAGCCATTACT AAGAGGAATGGTGCCCTTAGGACCACAGAACTATGGAGGTGCAATGAGACCCCCACTGAATGCTTTAGGTGGCCC TGGAATGCCTGGAATGAACATGGGTCCAGGTGGTGGTAGACCTTGGCCAAACCCAACAAATGCCAATTCAATACC ATACTCCTCAGCATCTCCTGGGAATTATGTAGGTCCTCCAGGAGGTGGAGGCCACCAGGAACACCCATCATGCC ACCTAATTTTCCAATGGGTCCTGGGTCAGATGGTCCCATGGGTGGATTAGGAGGAATGGAGTCACATGAA TGGCTCTTTAGGCTCAGGAGATATGGACAGTATTTCCAAGAATTCTCCCAATAATATGAGCCTGAGTAATCAACC GGGCACTCCAAGGGATGATGGCGAAATGGGGGGAAATTTCTTAAATCCTTTTCAGAGTGAGAGTTACTCCCCTAG ${\tt CATGACAATGAGCGTG} \underline{{\tt TGA}} {\tt TCCATTACCAAGTCTCCTCATGAAAACCACAGTGAGTCAGCCCTTCACAGAACTAC}$ TCCTGCTCTCTCCCCTCTTTTGTGAAGAAAGCGGGTCCAAATGTGATTCAAACAACTGTACGGAGTGGCATATTA GTATGTTATACAGACATATACACATACATTGACCCACAGGACATTGTAAAATATTATCACATGACATCTTA AGTAGAAATAAGTAGGGACTTTTATTCCATCCTTTTTTTCACGTTTACATTTTAATTATTACAAGTTGCTCCTGC CCCCTCCCTGAACTATTTTGTGCTGTGTATATCACTGCTTTATATAAGTTATTTTTTAAGGTGAACTCAGATGTT ATGGTTTTGTAAATGTCTGCAATCATGGATAGGAATAAAATCGCTTATTTGAGAGCTTTC

PCT/US2003/028547

1775/6881 FIGURE 1645

MYGKGKSNSSAVPSDSQAREKLALYVYEYLLHVGAQKSAQTFLSEIRWEKNITLGEPPGFLHSWWCVFWDLYCAA PERRETCEHSSEAKAFHDYSAAAAPSPVLGNIPPGDGMPVGPVPPGFFQPFMSPRYPGGPRPPLRIPNQALGGVPGSQPLLPSGMDPTRQQGHPNMGGPMQRMTPPRGMVPLGPQNYGGAMRPPLNALGGPGMPGMNMGPGGGRPWPNPTNANSIPYSSASPGNYVGPPGGGGPPGTPIMPSPADSTNSGDNMYTLMNAVPPGPNRPNFPMGPGSDGPMGGLGGMESHHMNGSLGSGDMDSISKNSPNNMSLSNQPGTPRDDGEMGGNFLNPFQSESYSPSMTMSV

PCT/US2003/028547

1776/6881 FIGURE 1646A

GAATTCCCAGCTCTCTCCTCGCTCGCTCGCAGTCACAGACACTTGAGCACACGCGTACACCCAGACATCTTCGG GCTGCTATTGGATTGACTTTGAAGGTTCTGTGTGGGTCGCCGTGGCTGCATGTTTGAATCAGGTGGAGAAGCACT TCCCAAGGACTAATCTGATCGGGTCTTCCTTCATCAGGAACGAATGCAGGAATTTGGGAACTGAGCTGTGCAAGT CGAGAGAGAGAAAAAACGGGGACT**ATC**GGGAGAAAAAAGATTCAGATTACGAGGATTATGGATGAACGTAACA GACAGGTGACATTTACAAAGAGGAAATTTGGGTTGATGAAGAAGGCTTATGAGCTGAGCGTGCTGTGTGACTGTG AGATTGCGCTGATCATCTTCAACAGCACCAACAAGCTGTTCCAGTATGCCAGCACCGACATGGACAAAGTGCTTC GCCTTAATGGCTGTGACAGCCCAGACCCCGATGCGGACGATTCCGTAGGTCACAGCCCTGAGTCTGAGGACAAGT ACAGGAAAATTAACGAAGATATTGATCTAATGATCAGCAGGCAAAGATTGTGTGCTGTTCCACCTCCCAACTTCG AGATGCCAGTCTCCATCCCAGTGTCCAGCCACAACAGTTTGGTGTACAGCAACCCTGTCAGCTCACTGGGAAACC CCAACCTATTGCCACTGGCTCACCCTTCTCTGCAGAGGAATAGTATGTCTCCTGGTGTAACACATCGACCTCCAA GTGCAGGTAACACAGGTGGTCTGATGGGTGGAGACCTCACGTCTGGTGCAGGCACCAGTGCAGGGAACGGGTATG CCCCAATGAATTTAGGAATGAATAACCGTAAACCAGATCTCCGAGTTCTTATTCCACCAGGCAGCAAGAATACGA CTACCCCAGTGGTTTCCGTAGCAACTCCTACTTTACCAGGACAAGGAATGGGAGGATATCCATCAGCCATTTCAA GAGCTTGCACTAGCACTCATTTATCTCAGAGTTCAAATCTCTCCCTGCCTTCTACTCAAAGCCTCAACATCAAGT CAGAACCTGTTTCTCCTCCTAGAGACCGTACCACCCCTTCGAGATACCCACAACACACGCGCCACGAGGCGG GGAGATCTCCTGTTGACAGCTTGAGCAGCTGTAGCAGTTCGTACGACGGGAGCGACCGAGAGGATCACCGGAACG AATTCCACTCCCCATTGGACTCACCAGACCTTCGCCGGACGAAAGGGAAAGTCCCTCAGTCAAGCGCATGCGAC GTTTTGTAAAAGTACTTTTAAATTGCCTCAGTGATACAGTATAAAGATAAACAGAAATGCTGAGATAAGCTTAGC ACTTGAGTTGTACAACAGAACACTTGTACAAAATAGATTTTAAGGCTAACTTCTTTTCACTGTTGTGCTCCTTTG CAAAATGTATGTTACAATAGATAGTGTCATGTTGCAGGTTCAACGTTATTTACATGTAAATAGACAAAAGGAAAC ATTTGCCAAAAGCGGCAGATCTTTACTGAAAGAGAGCAGCTGTTATGCAACATATAGAAAAATGTATAGATGC TTGGACAGACCCGGTAATGGGTGGCCATTGGTAAATGTTAGGAACACCAGGTCACCTGACATCCCAAGAATGC TCACAAACCTGCAGGCATATCATTGGCGTATGGCACTCATTAAAAAGGATCAGAGACCATTAAAAGAGGACCATA CTTATTAAATAAAAATATAAAAATATGTACATTACATTTTGCTTATTTTCATATAAAAGGTAAGACAGAGTTTGC AAAGCATTTGTGGCTTTTTGTAGTTTACTTAAGCCAAAATGTGTTTTTTTCCCCTTGATAGCTTCGCTAATATTT TAAACAGTCCTGTAAAAAACCAAAAAGGACTTTTTGTATAGAAAGCACTACCCTAAGCCATGAAGAACTCCATGC TTTGCTAACCAAGATAACTGTTTTCTCTTTGTAGAAGTTTTGTTTTTGAAATGTGTATTTCTAATTATAAAAAT AATAGCAGAAGTTTTGTTATCTTAATAGCGGGAGGGGGGTATATTTGTGCAGTTGCACATTTGAGTAACTATTTT CTTTCTGTTTTCTCTTTACTCTGCTTACATTTTATAAGTTTAAGGTCAGCTGTCAAAAGGATAACCTGTGGGGTTA GAACATATCACATTGCAACACCCTAAATTGTTTTTAATACATTAGCAATCTATTGGGTCAACTGACATCCATTGT CACCATTCACCATGCATCTTGGAATTCAGTAAGTGCATATCCTAACTTGCCCATATTCTAAATCATCTGGTTGG TTTTCAGCCTAGAATTTGATACGCTTTTTAGAAATATGCCCAGAATAGAAAAGCTATGTTGGGGCACATGTCCTG CAAATATGGCCCTAGAAACAAGTGATATGGAATTTACTTGGTGAATAAGTTATAAATTCCCACAGAAGAAAAATG TGAAAGACTGGGTGCTAGACAAGAAGGAAGCAGGTAAAGGGATAGTTGCTTTGTCATCCGTTTTTAATTATTTTA ACTGACCCTTGACAATCTTGTCAGCAATATAGGACTGTTGAACAATCCCGGTGTGTCAGGACCCCCAAATGTCAC TTCTGCATAAAGCATGTATGTCATCTATTTTTTCTTCAATAAAGAGATTTAATAGCCATTTCAAGAAATCCCATA

PCT/US2003/028547

1777/6881 FIGURE 1646B

PCT/US2003/028547

1778/6881 FIGURE 1647

MGRKKIQITRIMDERNRQVTFTKRKFGLMKKAYELSVLCDCEIALIIFNSTNKLFQYASTDMDKVLLKYTEYNEP HESRTNSDIVETLRKKGLNGCDSPDPDADDSVGHSPESEDKYRKINEDIDLMISRQRLCAVPPPNFEMPVSIPVS SHNSLVYSNPVSSLGNPNLLPLAHPSLQRNSMSPGVTHRPPSAGNTGGLMGGDLTSGAGTSAGNGYGNPRNSPGL LVSPGNLNKNMQAKSPPPMNLGMNNRKPDLRVLIPPGSKNTMPSVSEDVDLLLNQRINNSQSAQSLATPVVSVAT PTLPGQGMGGYPSAISTTYGTEYSLSSADLSSLSGFNTASALHLGSVTGWQQQHLHNMPPSALSQLGACTSTHLS QSSNLSLPSTQSLNIKSEPVSPPRDRTTTPSRYPQHTRHEAGRSPVDSLSSCSSSYDGSDREDHRNEFHSPIGLT RPSPDERESPSVKRMRLSEGWAT

PCT/US2003/028547

1779/6881 FIGURE 1648

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PCT/US2003/028547

1780/6881 FIGURE 1649

MQARQVMLAVALYSHGCTEIRTFSLDFLKKRIFQIHTSRMTLADDVTLDDLIMAKDDLSGADIKAICTEAGLMAL RERRMKVTNEDYIDFSKIEIREG

PCT/US2003/028547

1781/6881 FIGURE 1650

TTTCCTCTTTCTCTAAGAGTCTCTCTCTCCCTTTCCCTCTCTCCCCCCAATCTGTCTTTCTAGCATGTTGCCC CTCCCTGGACTGAAGAGAGGGGAGAATAGAAGCCCAAGACTAAGATTCTCAAAAATCGTTTATTACCCAGAACTCTT TGTCTGGGTCAGTCAAGAACCATTTCCAAACAAGGACATGGAGGGAAGGCTTCCTAAGGGAAGACTTCCTGTCCC AAAGGAAGTGAACCGCAAGAAGAACGATGAGACAAACGCTGCCTCCCTGACTCCACTGGGCAGCAGTGAACTCCG CTCCCCAAGAATCAGTTACCTCCACTTTTTT<u>TAA</u>TCGTAACACCTCCATTTGTATTACATATGGTGTATGGGTAT TGATGAGGTCATGGTATCATATATGGGATTTTTTTCTGTGTAAATCATCAAGTATAAGAAGAAACTATGGGACTC TGAGCCTTGCTTTAGAGAATTTACAGTGGACAAATAGGTGTCATCAAACCAGTTTTTAATCATTCTGACTCAAGT GAAAACGCTCAGAATTTCACACTGTGAATCCACGTTTACAACCCTTACAGGTGGGCCTTCAGGCCTGGTTCGCTA TAGTTTATGTTCATCAATTGTCTGTATATCTCTATATTTTATCCATGTACTCTTTTGATGTATAGAAGTAGTTTG AAACTCATTGTTTCCTTGTGGTAAGTGACCGAGATGCTGCCACAGGACCTGAGACACTGATGAATGGTGCTATTT TGGACTTTCAACATGCTCCTTGGCGAGGTAGCTCTGATGGAGTTATTTTTTATTTCCATGTTCTAAGAAGGTGTT GGTACTCTGTTTCCCTGAATGTTGTTCTCTAGACTGGATTGACTTGTTTTCCTTGTGTCTTCAGTGTGGCTTTCT CTGAGTAGGAATATGAAAATGACACCTTTTCCAAATATTAAATTGGAAAACAAGGTCTACAAAATCATGATACTT TTTTAAAAGGCAGAGCATTCTTTTTCGGCAATTTTGATAAGCAAGGTGTAGATTTACATTTTTGTCCTTGCTCC CAACGAAATGGATAAACAAAAATAAATTACCATCTACTCATGGAATGTTGTTGTTAGCCAGTCTGAAAGCCCA CCTTAATTTTTATATAACTGTCTTTAGCTCTTCTTTTGACAGGGCAGGCCTTGTTCTGAACTGTTTCGCTTCTGA CTGTTAAACACCGATGACGCATGCACTGCACTTCTTCGTTTTCTTGCTCCCCCATTGGCCTGAGTTTCTTGT GCATTACTCCTCTCCCTCCTTCGTTAGAATAGGTATATCAGCTGTGTAAATAGAGCAAGAAAACAGTATTCTGCA TCTGTGGCATTTATGTAGAGTTGCAGTTGTGTACTGCTGAAAATGCAGGCTTTTGTAACAGTGTGATCTTTACTG GTAACTGTCTG

PCT/US2003/028547

1782/6881 FIGURE 1651

 ${\tt MVYYPELFVWVSQEPFPNKDMEGRLPKGRLPVPKEVNRKKNDETNAASLTPLGSSELRSPRISYLHFF}$

PCT/US2003/028547

FIGURE 1652

PCT/US2003/028547

1784/6881 FIGURE 1653

MAVGKNKCLTKGGKKGAKKKVVDQFSKKDWYDVKASAMFSIRNIGKTLVTRTQGTKIASDGLKGRVFEVSLADLQ NDEVAFRKFKLITEDVQGKNCLSNFHGMDLTRDKMCSMVKKWQTMIEAHVDVRTTDGYLLHLFCVGFTKKRNNQI RKTSYAQHQQVRQIRKKMMEIMTPEVQTNDLKDPEVQTNYSGQ

PCT/US2003/028547

1785/6881 FIGURE 1654

PCT/US2003/028547

1786/6881 FIGURE 1655

CCGCAGCCCATCGGCATGGCTCAAGAGTTTGTGAACTGCAAAATCCAGCCTGGGAAGGTGGTTGTTCATCAAG CCCACCTGCCCGTACTGCAGGAGGGCCCAAGAGATCCTCAGTCAATTGCCCATCAAACAAGGGCTTCTGGAATTT GTCGATATCACAGCCACCAACCACACTAACGAGATTCAAGATTATTTGCAACAGCTCACGGGAGCAAGAACGGTG CCTCGAGTCTTTATTGGTAAAGATTGTATAGGCGGATGCAGTGATCTAGTCTCTTTGCAACAGAGTGGGGAACTG CTGACGCGGCTAAAGCAGATTGGAGCTCTGCAGTAACCACAGAACAGGCCCCATGCTGACGTCCCTCAAGAG CTGGATGGCATTGCAAATGATGACAGCACTTCTGGTGGATGAATTTGGGGGCACAAACAGCTTTTTTCCTCTTTT GGCTCAGTATTTAAAAGTGGACCAACTTGCTCTTAATCACAGGGCCAAGAAGGTTGACGGGCCATCTTGGTTTTC TTCTGGATGTGCTCTTTGGTTTTCAGAAGACTGTGACAAGTTCTGGCCCAGGATTCGCTCACTGACCCTCAATTG TCCTCTTTGGCATGCGTTTCTTACTGTTCTCCATGTGTCGGCATGTCTCTACCTCTAAGCCAGTGTTTTTCAACT ATGTTTATCCAGACTCCTTCTCCACAATGATGAATCCACAGTTGGTTATCTGCTACTGCCCATTAGCTAAAATCA CATCTCTCCACTCAACTCCACCCCATCCCATCCCACCTTGAAAATCACTGCTCTGAACCAGTGTTCTCCACCTTG TCCTCCACAGATCTCATAGGAAATGTTCAACAATTCTGTGAAAGGTCACAGGACCCAATTGGAGAAATCATATGA AAAGCATAGTTGGTCTTGGTGTCATATGGATCAGAGGCACAAGTGCAGAGGCTGTGGTCATGCGGAACACTCTGT ATGAAATGTAAAACATCTGATAAAACTTACAGCCCCCTACACCAAGAGTGTATCTGTGAAAGAGCTCCTACACTT TGAAAACTTAAGAATCCCTTATCATGAAGTTTGCCTGTTCTAGAATTGTAAGATTGTTAATTTCCTTCAATCTCT AGTGACAACACTTAATTTCTTTTCTAATAAAAAAAACCTATAGATGATTCAGTG

PCT/US2003/028547

1787/6881 FIGURE 1656

PCT/US2003/028547

1788/6881 FIGURE 1657

MPPKDDEKKDAGKSAKKDKDPVNKSGGKAKKKKWSKGKVRDKLNNLVLFDKATYDKLCKEVPNYKLITPAVVSER LKIRGSLARAALQAKHRAQVIYTRNTKGGDAPAAGEDA

WO 2004/030615 PCT/US2003/028547

1789/6881 FIGURE 1658

GACTGTACAATTTGTTCAAGGAATTTTTGTAGAAAAATACGATCCTACGATAGAAGATTCTTATAGAAAGCAAGT $\tt TGAAGTAGATGCACAACAGTGT{\color{red} {\bf ATG}} CTTGAAATCTTGGATACTGCAGGAACGGAGCAATTTACAGCAATGAGGGA$ TTTATACATGAAAAATGGACAAGGATTTGCATTAGTTTATTCCATCACAGCACAGTCCACATTTAACGATTTACA AGACCTGAGAGAACAGATTCTTCGAGTTAAAGACACTGATGATGTTCCAATGATTCTTGTTGGTAATAAGTGTGA CTTGGAAGATGAAAGGTTGTAGGGAAGGAACAAGGTCAAAATCTAGCAAGACAATGGAACAACTGTGCATTCTT AGAATCTTCTGCAAAATCAAAAATAAATGTTAATGAGATCTTTTATGACCTAGTGCGGCAAATTAACAGAAAAAC ${\tt TCCAGTGCCTGGGAAGGCTCGCAAAAAGTCATCATGTCAGCTGCTT}$ CCAGGTCTGAAGAACTGTTGCCCAATTCAACAGTGCCAGCATTCCAACTTTGTTAAACCTACCAACATCTTAAAT GGACTTTCCTGTGGTGGTACCCTTTAAGAGGCGGATGAAAGCTACTATATCAGTTTGCACATTCTAATCACTTTC CAGTATCACAAGAGAGATTTTTACTTATATAATAGTCCTAGAGTTTGCAGCTGGTAAAACCAGAGGCTACATCCA GTATTACTGCTAAGAGACATTCTTCATCCACCAATGTTGTACATGTATGAAAATGGTGTACTGTATACTTTAACA TGCCCCATACTTTGTATTGGAGAGTACAATAATGTAAATCCTAAAAGCACCACTATTTTAGCATAATAAAAGAAA GTCCAAAGAGCTCCTATATAGACTACTCCAGATAACTTCGCTTCTTTGATACTTGTAGCTTATTGTAATTTTTTT TAAGAAATTCAAGGTCATTATTATTGTACAAAATAAGCGCTTTGATTAACACAGCTATATAGTTTTTTAATTTT TAAAAAACCTGTGGAGACGGTGATCTTGTCTTTAAAACATGATAGTCCTTTCAGTATAATGTCTTAGATTAAAGA CGTTGCCTTTAATATCTGTTGGGAAGGAAATGTCCAGACTTTTCAAATCTCTTATTATATGTTTCCTTTTTTTGT TTACATAGGGAACAATGTTTATAGTCGTGTGTACAGTGGGGGTCTACAACAAGAAGTGTATATTTTCAAACAATT TTTTAATGATTTAACAATTTTTGTAAATCATTTTCAGGCTTCTGCAGCTGTAGATTCTCACTGTGAATCCCTTGC TTGCTCATGCATAAGTGTATTTGCAATACCAAATATACAGGTTTAGTATTTTTGCCTGTTAGTGATTGTTTCACA TGTGTAACGTTTTGGTTGAGATGTTAAATGGTGGACGAGTACTGTGGATGTGAATGTGGGAAGTAATTTTAATCA CATTAATGTTTGGATGTAAAGATTGTGTGTCTATCCAACAGGGAGCCACAGTATTTAAATTGACCAACCTAATGT

PCT/US2003/028547

1790/6881 FIGURE 1659

 ${\tt MLEILDTAGTEQFTAMRDLYMKNGQGFALVYSITAQSTFNDLQDLREQILRVKDTDDVPMILVGNKCDLEDERVVGKEQGQNLARQWNNCAFLESSAKSKINVNEIFYDLVRQINRKTPVPGKARKKSSCQLL}$

PCT/US2003/028547

1791/6881 FIGURE 1660

AGAAGTCCTACAAGGTGTCCACCTCTGGCCCCCGGGCCTTCAGCAGCCACTCCTACACAAGTGGGCCCGGTGCCC ACATCAGCTCCTCAAGCTTCTCCCAAGTGGGCAGCAGCTGCTTTCGGGGTGGCCTGGGCGGCGGCTGTGGTGGGG ${\tt CCAGCGGCATGGGAGGCATCACCGCGGTCACAGTCAACCAGAGCCTGCTGAGCCCCCTTGTCCTGGAGGTGGACC}$ CCGACATCCAGGCTGTGTGCACCCAGGAGAAGGAGCAGATCAAGACCCTCAACAACAAGTTTGCCTCCTTCATAG ACAAGGTACGGTTCCTGGAGCAGCAGAACAAGATGCTGGAGACCAAGTGGAGCCTCCTGCAGCAGCAGAAGACGG CCGGGAGCAACATGGACAACATGTTCAAGAGCTACATCAACACCTTAGGCGGCAGCTGGAGACTCTGGGCTAGG AGATCAATAAGCGTGCAGAGATGGAGAATGAATTTGTCCTCATCAAGAAGGATTGTGGATGAAGCTTACATTAAC AAGGTAGAGCTGGAGTCTCGCCTGGAAGGGCTGACTGATGAGATCAACTTCCTCAGGCAGCTGTATGAAGAGGAG ATCCGGGAGCTGCAGTCCTGGATCTCAGACACATCTGTGGTGCTGTCCATGGACAACAGCCGCTCCCTGGACATG AACAGCGTCATCGCTGAGGTCAAGGCACAGTACGAGGAGATCGCCAACCGCAGCCAGGCCGAGGCTGAGAGCATG TACCAGATCAAGGATGAGGAGCTGCAGAGTCTGGCTGGGAAGCATGGGGATAACCTGCGGTGCACAAAGACTAAG ATCTCCGAGATGAACCGGAACATCAGCCGGCTCCAGGCTGAGAATGAGGCCTCAAAGGCCAGAGGGCTTTCCTG GAGGCCGCCATTGCAGATGCCGAGCAGTGTGGAGAGCTGGCCATTAAGGATGCTAACGCCAAGTTGTCGAGCTGG AGGCCGCCTGCAGCGGGCCAAGCAGGACATGGCGTGGCAGCTGCGTGAGTACCAGGAGC<u>TGA</u>TGAACGTCAGGC TGGCCCTGGACATCGAGATCGCCACCTACAAGAAGCTGCTGGAGGGCGAGGAGAGCCGGCTGGAGTCTGGGATGC AGAACATGAGTATTCATACGAAGACCACCAGCGGCTATGCAAGTGGTCTGAGCTCGGCCTGTGGGGGGCCTCACAA GCCCGGCCTCAGCTACGGCCTGGGCGCCAGCTCCTTCAGCCGCACCAGCTACTCCAGGGCCGTGGTTGTGAAGA TCGAGACACGTGATGGGAAGCTGGTGTCCGAGTCCTCTGACGTCCTGCCCAAGTGAACAGCTGTGGCAGCCCCTC CCCACCTGAGGCTCAGCCCTAGGCCTCAGTCCACCCGCGGGGGAGTTTACTGCCTGGGGACCCCCCTTTGCCCA

PCT/US2003/028547

1792/6881 FIGURE 1661

MRMRSISVQRWRMNLSSSRRIVDEAYINKVELESRLEGLTDEINFLRQLYEEEIRELQSWISDTSVVLSMDNSRS LDMNSVIAEVKAQYEEIANRSQAEAESMYQIKDEELQSLAGKHGDNLRCTKTKISEMNRNISRLQAENEGLKGQR AFLEAAIADAEQCGELAIKDANAKLSSWRPPCSGPSRTWRGSCVSTRS

PCT/US2003/028547

1793/6881 FIGURE 1662

AGTGGGCAGCAGCTGCTTTCGGGGTGGCCTGGGCGGCGGCTGTGGTGGGGCCAGCGGCATGGGAGGCATCACCGC
GGTCACAGTCAACCAGAGCCTGCTGAGCCCCCTTGTCCTGGAGGTGGACCCCGACATCCAGGCTGTGTGCACCCA
GGAGAAGGAGCAGATCAAGACCCTCAACAACAAGTTTGCCTCCTTCATAGACAAGGTACGGTTCCTGGAGCAGCA
GAACAAGATGCTGGAGACCAAGTGGAGCCTCCTGCAGCAGCAGAAGACGGCCGGGAGCAACATGGACAACATGTT
CAAGAGCTACATCAACAACCTTAGGCGGCAGCTGGAGACTCTGGGCTAGGAGAAACTGAAGCTGGAGGCGGAGCT
TGGCAACATGTAGGGGCTGGTGGCTGGGATGCAGAACATGAGTATTCATACGAAGACCACCAGCGGCTATGCAAG
TGGTCTGAGCTCGGCCTGTGGGGGCCTCACAAGCCCCGGCCTCAGCTACGGCCTGGGCGCCAGCTCCTTCAGCCG
CACCAGCTACTCCAGGGCCGTGGTTGTGAAGATCGAGACACGTGATGGGAAGCTGGTGTCCGAGTCCTCTGACGT
CCTGCCCAAGTGAACAGCTG

PCT/US2003/028547

FIGURE 1663

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WO 2004/030615

PCT/US2003/028547

1795/6881 FIGURE 1664

 ${\tt GCGGCCGGGCCGTGAGCCTGCCCCCAACTCGCCCTCAGCCGGCTGGCCGGCGGGCC{\tt ATG}{\tt GAGGTCTACATCCC}}$ AAAACATTTTGTTGAAAAGAGATACAGCGAATTTCATGCTTTGCACAAAAAGCTTAAGAAATGTATAAAAACTCC AGAAATCCCTTCTAAACATGTTAGGAACTGGGTCCCCAAAGTCTTGGAACAGCGACGACAAGGCTTGGAAACATA CTTACAGGCTGTCATTTTAGAAAATGAAGAACTTCCCAAACTGTTTCTTGATTTCCTAAATGTGCGACACTTGCC CTCTCTACCAAAGGCAGAAAGTTGTGGATCTTTTGATGAAACAGAGTCTGAAGAGTCAAGCAAACTGTCCCACCA AGTCCTCCATGGGATATTTTACCCTCATCTACAGCCCAGG<u>TAG</u>AAATCCTACATGGCTAAAAGAAGCAGAAGCAA GTTTCGAAGTCACAGTCAAGGAAATCAATACCTACCAATTTAACCTAAACGCTATGATATAAACAGCTCTAGCT AGTGGTAAAGTGCACAGTCCCAGCTTAATTCAGGGCAGGGACATTTCCATTAGAATGGTGCTCTTAAAAATAGAA ACTGAACCGGGGCGGTGGTCAGGCTAAGGCCAAGTGTTTAAGAAGTAGAGTGTAGCTGCCAGCGTAGAAACCCAT GAAAAGGAGGCCACAGGAGATTCCTGGGAGCACTGGGTGTAGCAAAACAAAGCCACTCTCTGCTTCAGTCGCACC ATTTGCTAATTGAAAATCATATCCTGAATCATACTGAGACTGATCAACTTTGGTAGCTTTTTTTGTTCAGATCTTA TGACACACTACTCTCTCACCGTGAGATTTTCTCAGCCAGTGATAGTACATTCTGAAATGCTGGCACCAGGAGAC GGCCACAGACACACTGCTAAATGTGAAGATGGAACTAAACTGGAAATTAAATTATACTGACAATATTATGGCA TTTTTAAGATCATGGCATTTTAATTTACATTAGAGTGGAGTTGCATCATACTCAGGGGTTAGCTTCCAAGGTCAG TACATAGGTAAAATGGGCTATTAGGATGATCCTTGAAAGCCCTTTAGAAGGGTGCCATGTTGGAAACCTGTACAT TGTTTGTTTAGGGGCCATTTTGTTAAAAAAAAAAAACCACATAACTTTTAACACTAGAATCAGCCCGCAAGATGCT TTACTCAAGGGTGTGCATTCATTTTAGGTGGGATCGCCACAGGATTTCATGTTATTTTCCTTACGGCTTCCTTTT CACTGACCTCATTTGTTGAGTTAATGTAAGTTAAATGTGTCTATGATATAACTCCACTGTACATCATCCTTTGAG AGCTAGCCTATTTATGGTTATTCGTTTTAGTAAGTTCTGTGGGAGCAAGGTATTTAAAATCAAAACTAATAACTA CATCATGGTTTTTGATTAGGATCTAAATATTCAGGTTTTAAGCCTGCTGCAAACTTTTAAAATATTATGATAGAT TCTGTACTACATGTGGGAAACAAGCAAGAACTAAATAATCAAATGTTGTCAACCAAAAGTAATAGTTGGGTATTG AAAAAAAAAAA

PCT/US2003/028547

1796/6881 FIGURE 1665

MEVYIPSFRYEESDLERGYTVFKIEVLMNGRKHFVEKRYSEFHALHKKLKKCIKTPEIPSKHVRNWVPKVLEQRR QGLETYLQAVILENEELPKLFLDFLNVRHLPSLPKAESCGSFDETESEESSKLSHQPVLLFLRDPYVLPAASDFP NVVIEGVLHGIFYPHLQPR

PCT/US2003/028547

1797/6881 FIGURE 1666

AGCTCGCGCAGTCGTTCGGGTGAGCGAAGATCGCGGCCGAGAGGGAACCTCCTCCGCTGGGGGACGGGAAGCCCA CCGACTTTGAGGATCTGGAGGACGGAGAGGACCTGTTCACCAGCACTGTCTCCACCCTAGAGTCAAGTCCATCAT CTCCAGAACCAGCTAGTCTTCCTGCAGAAGATATTAGTGCAAACCTCCAATGGCCCAAAACCCACAGAAGTTGTAT TAGATGATGACAGAAGATCTTTTTGCAGAAGCCACAGAAGAAGTTTCTTTGGACAGCCCTGAAAGGGAACCTA TCCTATCCTCGGAACCTTCTCCTGCAGTCACCCTGTCACTCCTACTACACTCATTGCTCCTAGAATTGAATCAA AGAGTATGTCTGCTCCCGTGATCTTTGATAGATCCAGGGAAGAGATTGAAGAAGAAGCAAATGGAGACATTTTTG ACATAGAAATTGGTGTATCAGATCCAGAAAAAGTTGGTGATGGCATGAATGCCTATATGGCATATAGAGTAACAA CAAAGACATCTCTTTCCATGTTCAGTAAGAGTGAATTTTCAGTGAAAAGAAGATTCAGCGACTTTCTTGGTTTGC ACAGCAAATTAGCAAGCAAATATTTACATGTTGGTTATATTGTGCCACCAGCTCCAGAAAAGAGTATAGTAGGGA TGACCAAGGTCAAAGTGGGTAAAGAAGACTCATCATCCACTGAGTTTGTAGAAAAACGGAGAGCAGCTCTTGAAA GGTATCTTCAAAGAACAGTAAAACATCCAACTTTACTACAGGATCCTGATTTAAGGCAGTTCTTGGAAAGTTCAG AGCTGCCTAGAGCAGTTAATACACAGGCTCTGAGTGGAGCAGGAATATTGAGGATGGTGAACAAGGCTGCCGACG CTGTCAACAAAATGACAATCAAGATGAATGAATCGGATGCATGGTTTGAAGAAAAGCAGCAGCAATTTGAGAATC TGGATCAGCAACTTAGGAAACTTCATGTCAGTGTTGAAGCCTTGGTCTGTCATAGAAAAGAACTTTCAGCCAACA CAGCTGCCTTTGCTAAAAGTGCTGCCATGTTAGGTAATTCTGAGGATCATACTGCTTTATCTAGAGCTTTGTCTC AGCTTGCAGAGGTTGAGGAGAAGATAGACCAGTTACATCAAGAACAAGCTTTTGCTGACTTTTATATGTTTTCAG AACTACTTAGTGACTACATTCGTCTTATTGCTGCAGTGAAAGGTGTTTTGACCATCGAATGAAGTGCTGGCAGA AATGGGAAGATGCTCAAATTACTTTGCTCAAAAAACGTGAAGCTGAAGCAAAAATGATGGTTGCTAACAAACCAG ATAAAATACAGCAAGCTAAAAATGAAATAAGAGAGTGGGAGGCGAAAGTGCAACAAGGGGAAAGAGATTTTGAAC TCAAGTACTTAGAATCACTAGTTCAAACAACAACAGCTGATAAAATACTGGGAAGCATTCCTACCTGAAGCCA AAGCCATTGCCTAGCAATAAGATTGTTGCCGTTAAGAAGACCTTGGATGTTGTTCCAGTTATGCTGGATTCCACA CACACACACACACACACACACACTCTGACATTTTATTACAAGCTGCATGTCCTGACCCTCTTTGAATTAAG TGGACTGTGGCATGACATTCTGCAATACTTTGCTGAATTGAACACTATTGTGTCTTAAATACTTGCACTAAATAG TGCACTGCAAGACCAGAAAATTTTACAATATTTTTTCTTTACAATATGTTCTGTAGTATGTTTACCCTCTTTATG AAGTGAATTACCAATGCTTTGAATAATGTTCACTTATACATTCCTGTACAGAAATTACGATTTTGTGATTACAGT **AATAAAATGATATTCCTTGTG**

PCT/US2003/028547

1798/6881 FIGURE 1667

MAAEREPPPLGDGKPTDFEDLEDGEDLFTSTVSTLESSPSSPEPASLPAEDISANSNGPKPTEVVLDDDREDLFA EATEEVSLDSPEREPILSSEPSPAVTPVTPTTLIAPRIESKSMSAPVIFDRSREEIEEEANGDIFDIEIGVSDPE KVGDGMNAYMAYRVTTKTSLSMFSKSEFSVKRRFSDFLGLHSKLASKYLHVGYIVPPAPEKSIVGMTKVKVGKED SSSTEFVEKRRAALERYLQRTVKHPTLLQDPDLRQFLESSELPRAVNTQALSGAGILRMVNKAADAVNKMTIKMN ESDAWFEEKQQQFENLDQQLRKLHVSVEALVCHRKELSANTAAFAKSAAMLGNSEDHTALSRALSQLAEVEEKID QLHQEQAFADFYMFSELLSDYIRLIAAVKGVFDHRMKCWQKWEDAQITLLKKREAEAKMMVANKPDKIQQAKNEI REWEAKVQQGERDFEQISKTIRKEVGRFEKERVKDFKTVIIKYLESLVQTQQQLIKYWEAFLPEAKAIA

PCT/US2003/028547

1799/6881 FIGURE 1668

TGAAAGAGCTGGGGCTCCGCGAGGAAAACGAGGCGTGTATAATGGAAGCTGGGGAGGCCGGGGAGAGGTTATTA CGACCTATTGCCCTGCTAACAACGAGCCAATAGCAAGAGTCCGACAGGCCAGTGTGGCAGACTATGAAGAAACTG TAAAGAAAGCAAGAGAAGCATGGAAAATCTGGGCAGATATTCCTGCTCCAAAACGAGGAGAAATAGTAAGACAGA TTGGCGATGCCTTGCGGGAGAAGATCCAAGTACTAGGAAGCTTGGTGTCTTTGGAGATGGGGAAAATCTTAGTGG AAGGTGTGGGTGAAGTTCAGGAGTATGTGGATATCTGTGACTATGCTGTTGGTTTATCAAGGATGATTGGAGGAC CTATCTTGCCTTCTGAAAGATCTGGCCATGCACTGATTGAGCAGTGGAATCCCGTAGGCCTGGTTGGAATCATCA CGGCATTCAATTTCCCTGTGGCAGTGTATGGTTGGAACAACGCCATCGCCATGATCTGTGGAAATGTCTGCCTCT GGAAAGGAGCTCCAACCACTTCCCTCATTAGTGTGGCTGTCACAAAGATAATAGCCAAGGTTCTGGAGGACAACA AGCTGCCTGGTGCAATTTGTTCCTTGACTTGTGGTGGAGCAGATATTGGCACAGCAATGGCCAAAGATGAACGAG TGAACCTGCTGTCCTTCACTGGGAGCACTCAGGTGGGGAAAACAGGTGGGCCTGATGGTGCAGGAGAGGTTTGGGA GAAGTCTGTTGGAACTTGGAGGAAACAATGCCATTATTGCCTTTGAAGATGCAGACCTCAGCTTAGTTGTTCCAT CAGCTCTCTCGCTGCTGGGGAACAGCTGGCCAGAGGTGTACCACTGCGAGGCGACTGTTTATACATGAAAGCA TCCATGATGAGGTTGTAAACAGACTTAAAAAGGCCTATGCACAGATCCGAGTTGGGAACCCATGGGACCCTAATG GTGGCACAGTGGTCTATGGGGGCAAGGTTATGGATCGCCCTGGAAATTATGTAGAACCGACAATTGTGACAGGTC TTGGCCACGATGCGTCCATTGCACACACAGAGACTTTTGCTCCGATTCTCTATGTCTTTAAATTCAAGAATGAAG AAGAGGTCTTTGCATGGAATAATGAAGTAAAACAGGGACTTTCAAGTAGCATCTTTACCAAAGATCTGGGCAGAA TCTTTCGCTGGCTTGGACCTAAAGGATCAGACTGTGGCATTGTAAATGTCAACATTCCAACAAGTGGGGCTGAGA TTGGAGGTGCCTTTGGAGGAGAAAAGCACACTGGTGGTGGCAGGGAGTCTGGCAGTGATGCCTGGAAACAGTACA TGAGAAGGTCTACTTGTACTATCAACTACAGTAAAGACCTTCCTCTGGCCCAAGGAATCAAGTTTCAGTAAAGGT GTTTTAGATGAACATCCCTTAATTTGAGGTGTTCCAGCAGCTGTTTTTGGAGAAAGACAAAGAAAATTAAAGTTTT CCCTGAATAAATGCATTATTATGACTGTGACAGTGACTAATCCCCCTATGACCCCAAAGCCCTGATTAAATCAAG AGATTCCTTTTTTAAAAATCAAAATAAAATTGTTACAACATAGCCATAGTTACT

PCT/US2003/028547

FIGURE 1669

PCT/US2003/028547

FIGURE 1670

AGCTGCTCATCCAGAAGTTCCTCAGCCTGTACGGCGACCAGATCGACATGCACCGCAAATTCGTGGTGCAGCTGT TGCCGTTGCAGATCCAGCTCACTACCCTGGGAAATCTTACACCTTCAAGCACTGTGTTTTTCTGCTGTGATATGC AGGAAAGGTTCAGACCAGCCATCAAGTATTTTGGGGATATTATTAGCGTGGGACAGAGATTGTTGCAAGGGGCCCC GGATTTTAGGAATTCCTGTTATTGTAACAGAACAATACCCTAAAGGTCTTGGGAGCACGGTTCAAGAAATTGATT TAACAGGTGTAAAACTGGTACTTCCAAAGACCAAGTTTTCAATGGTATTACCAGAAGTAGAAGCGGCATTAGCAG AGATTCCCGGAGTCAGGAGTGTTGTATTATTTGGAGTAGAAACTCATGTGTGCATCCAACAAACTGCCCTGGAGC TAGTTGGCCGAGGAGTCGAGGTTCACATTGTTGCTGATGCCACCTCATCAAGAAGCATGATGGACAGGATGTTTG CCCTCGAGCGTCTCGCTCGAACCGGGATCATAGTGACCACGAGTGAGGCTGTTCTGCTTCAGCTGGTAGCTGATA AGGACCATCCAAAATTCAAGGAAATTCAGAATCTAATTAAGGCGAGTGCTCCAGAGTCGGGTCTGCTTTCCAAAG TATAGGACATTTGAAGAACTGGTATGCTACTCACTGGTGAAGGACAGTCAGGTGAAGGACTGTAAGCCCACACAA GCTCTTCTTATCTCTACTAGAATTAAAATGTTAAGTCAAAAACGGCTCCTTTTTTGCGCCTCCTAGTGAAACTTA TGTTAATGTGCTTTTATTTATAAAAAAATTACAATGAAGATGCCTGTTTTGTCTCTACTGTGTACTCTGATCG TATCTTTCCAAAGTGCAGACTCTTGTGAAGTTTTCTTAAATTGTTCACTTTAAAGAAAATGACGTACCAACAATG AATAAGATTATTGCATATGAATTTACCCACAGGACTCTGAATCATGTTACCCACTCCCCTCACAATGTTGTCCAC TTATTTTGGTCACTATTACTAAATCTCTGTTAATATTCTCTCTTTTTAACTGAAAAGGGATGGGATAGAAGGGTTT GCAATGCCATATTATTGGTGGAGGGCTGTTTTAACATCTTTGAAGTATGGCTTGCTGAATATCTTTACCAACATC TTGAATATATATTCTAGTGTCCACAAGATTTAGCAAAAAGATAAAGCTTGGGTGGAATATCATTTTAAAATGTTC ATGTTCTGTTCTATATTTTCTTCACCTACTCTCCAAATATTGTAATGCAAAAAGTCTCAGTAATGATTTGGTAGT TTTCAAATATGTGAAATGTGAAACTGCTGTCTTTTATATTAAAGTAATTAAAGAAAA

PCT/US2003/028547

1802/6881 FIGURE 1671

 $\texttt{GCTTGCCCGTCGGTCGCTCGCTCGCTCGCTCCCGCTCC} \textbf{\underline{ATG}} \texttt{GCGCTCTTCGTGCGGCTGCTGGCTC}$ TCGCCCTGGCTCTGGCCCTGGGCCCCGCCGCCGACCCTGGCGGGTCCCGCCAAGTCGCCCTACCAGCTGGTGCTGC AGCACAGCAGGCTCCGGGGCCGCCAGCACGCCCCAACGTGTGTGCTGCAGAAGGTTATTGGCACTAATAGGA AGTACTTCACCAACTGCAAGCAGTGGTACCAAAGGAAAATCTGTGGCAAATCAACAGTCATCAGCTACGAGTGCT GTCCTGGATATGAAAAGGTCCCTGGGGAGAAGGGCTGTCCAGCAGCCCTACCACTCTCAAACCTTTACGAGACCC TGGGAGTCGTTGGATCCACCACCACTCAGCTGTACACGGACCGCACGGAGAAGCTGAGGCCTGAGATGGAGGGGC CCGGCAGCTTCACCATCTTCGCCCCTAGCAACGAGGCCTGGGCCTCCTTGCCAGCTGAAGTGCTGGACTCCCTGG TGAAACACGGCATGACCCTCACCTCTATGTACCAGAATTCCAACATCCAGATCCACCACTATCCTAATGGGATTG TCATCTCCACCATCACCAACAACATCCAGCAGATCATTGAGATCGAGGACACCTTTGAGACCCTTCGGGCTGCTG TGGCTGCATCAGGGCTCAACACGATGCTTGAAGGTAACGGCCAGTACACGCTTTTGGCCCCGACCAATGAGGCCT TCGAGAAGATCCCTAGTGAGACTTTGAACCGTATCCTGGGCGACCCAGAAGCCCTGAGAGACCTGCTGAACAACC TGGAGGTGGGCTGCAGCGGGACATGCTCACTATCAACGGGAAGGCGATCATCTCCAATAAAGACATCCTAGCCA CCAACGGGGTGATCCACTACATTGATGAGCTACTCATCCCAGACTCAGCCAAGACACTATTTGAATTGGCTGCAG AGTCTGATGTGTCCACAGCCATTGACCTTTTCAGACAAGCCGGCCTCGGCAATCATCTCTCTGGAAGTGAGCGGT TGACCCTCCTGGCTCCCCTGAATTCTGTATTCAAAGATGGAACCCCTCCAATTGATGCCCCATACAAGGAATTTGC TTCGGAACCACATAATTAAAGACCAGCTGGCCTCTAAGTATCTGTACCATGGACAGACCCTGGAAACTCTGGGCG GCAAAAAACTGAGAGTTTTTGTTTATCGTAATAGCCTCTGCATTGAGAACAGCTGCATCGCGGCCCACGACAAGA GGGGGAGGTACGGGACCCTGTTCACGATGGACCGGGTGCTGACCCCCCAATGGGGACTGTCATGGATGTCCTGA AGGGAGACAATCGCTTTAGCATGCTGGTAGCTGCCATCCAGTCTGCAGGACTGACGGAGACCCTCAACCGGGAAG GAGTCTACACAGTCTTTGCTCCCACAAATGAAGCCTTCCGAGCCCTGCCACCAAGAGAACGGAGCAGACTCTTGG GAGATGCCAAGGAACTTGCCAACATCCTGAAATACCACATTGGTGATGAAATCCTGGTTAGCGGAGGCATCGGGG CCCTGGTGCGGCTAAAGTCTCTCCAAGGTGACAAGCTGGAAGTCAGCTTGAAAAACAATGTGGTGAGTGTCAACA AGGAGCCTGTTGCCGAGCCTGACATCATGGCCACAAATGGCGTGGTCCATGTCATCACCAATGTTCTGCAGCCTC CAGCCAACAGACCTCAGGAAAGAGGGGATGAACTTGCAGACTCTGCGCTTGAGATCTTCAAACAAGCATCAGCGT TTTCCAGGGCTTCCCAGAGGTCTGTGCGACTAGCCCCTGTCTATCAAAAGTTATTAGAGAGGATGAAGCAT<u>TAG</u>C TTGAAGCACTACAGGAGGAATGCACCACGGCAGCTCTCCGCCAATTTCTCTCAGATTTCCACAGAGACTGTTTGA ATGTTTCAAAACCAAGTATCACACTTTAATGTACATGGGCCGCACCATAATGAGATGTGAGCCTTGTGCATGTG ACTTGGATGTCACTGCCTGACATTCACTTCCAGAGAGGACCTATCCCAAATGTGGAATTGACTGCCTATGCCAAG TCCCTGGAAAAGGAGCTTCAGTATTGTGGGGCTCATAAAACATGAATCAAGCAATCCAGCCTCATGGGAAGTCCT GGCACAGTTTTTGTAAAGCCCTTGCACAGCTGGAGAAATGGCATCATTATAAGCTATGAGTTGAAATGTTCTGTC AAATGTGTCTCACATCTACACGTGGCTTGGAGGCTTTTATGGGGCCCTGTCCAGGTAGAAAAGAAATGGTATGTA GAGCTTAGATTTCCCTATTGTGACAGAGCCATGGTGTTTTGTAATAATAAAACCAAAGAAACATA

PCT/US2003/028547

FIGURE 1672

MALFVRLIALALALALGPAATLAGPAKSPYQLVLQHSRLRGRQHGPNVCAVQKVIGTNRKYFTNCKQWYQRKICG KSTVISYECCPGYEKVPGEKGCPAALPLSNLYETLGVVGSTTTQLYTDRTEKLRPEMEGPGSFTIFAPSNEAWAS LPAEVLDSLVSNVNIELLNALRYHMVGRRVLTDELKHGMTLTSMYQNSNIQIHHYPNGIVTVNCARLLKADHHAT NGVVHLIDKVISTITNNIQQIIEIEDTFETLRAAVAASGLNTMLEGNGQYTLLAPTNEAFEKIPSETLNRILGDP EALRDLLNNHILKSAMCAEAIVAGLSVETLEGTTLEVGCSGDMLTINGKAIISNKDILATNGVIHYIDELLIPDS AKTLFELAAESDVSTAIDLFRQAGLGNHLSGSERLTLLAPLNSVFKDGTPPIDAHTRNLLRNHIIKDQLASKYLY HGQTLETLGGKKLRVFVYRNSLCIENSCIAAHDKRGRYGTLFTMDRVLTPPMGTVMDVLKGDNRFSMLVAAIQSA GLTETLNREGVYTVFAPTNEAFRALPPRERSRLLGDAKELANILKYHIGDEILVSGGIGALVRLKSLQGDKLEVS LKNNVVSVNKEPVAEPDIMATNGVVHVITNVLQPPANRPQERGDELADSALEIFKQASAFSRASQRSVRLAPVYQ KLLERMKH

PCT/US2003/028547

1804/6881 FIGURE 1673

CCTGGGGCTTCCGCCTGGTGGGCGGCCGGGACTTCAGCGCGCCCCTCACCATCTCACGGGTCCATGCTGGCAGCA AGGCTGCATTGGCTGCCCTGTGCCCAGGAGACCTGATCCAGGCCATCAATGGTGAGAGCACAGAGCTCATGACAC GCTGGCCCAGTGCCCCTGATGACAGCAAGGCTCAGGCACACAGGATCCACATCGATCCTGAGATCCAGGACGGCA GCCCAACAACCAGCAGGCGGCCCTCAGGCACCGGGACTGGGCCAGAAGATGGCAGACCAAGCCTGGGATCTCCAT ATGGACAACCCCTCGCTTTCCAGTCCCTCACAATGGCAGCGAGGCCACCCTGCCAGCCCAGATGAGCACCC TGCATGTGTCTCCACCCCCAGCGCTGACCCAGCCAGAGGCCTCCCGCGGAGCCGGGACTGCAGAGTCGACCTGG GCTCCGAGGTGTACAGGATGCTGCGGGAGCCAGCCGAGCCCGTGGCCGCGGAGCCCAAGCAGTCAGGCTCCTTCC GCTACTTGCAGGGCATGCTAGAGGCCGGCGAGGGCGGGGATTGGCCCGGGCCTGGCGGCCCCCGGAACCTCAAGC CCACGGCCAGCAAGCTGGGCGCTCCGCTGAGCGGCCTGCAGGGGCTGCCCGAGTGCACGCGCTGCGGCCACGGCA TCGTGGGCACCATCGTCAAGGCACGGGACAAGCTCTACCATCCCGAGTGCTTCATGTGCAGTGACTGCGGCCTGA ACCTCAAGCAGCGTGGTTACTTCTTTCTGGACGAGCGGCTCTACTGTGAGAGCCACGCCAAGGCGCGCGTGAAGC ${\tt CGCCCGAGGGCTACGACGTGGTGGCGGTGTACCCCAATGCCAAGGTGGAACTCGTC}{{\tt TGA}}{\tt GCTGGGACCCTGCTCC}$ CACGCCTGCTTCTTAAGGTCCCTGCTCGGCCGGTGTAAATATGTTTCACCCTGTCCCTCTAATAAAGCTCCTCTG TGCTTAGGTGCCAGGCATGTCCTAGGCTCTGGGTGCAGTAGTGAGCAGGACGGGTACCATGCTGCCCTGAAGGGG CCACAGCCTGGGTGGAAGGCAGACCTGAATCACAACGGGCCAGCTCTAGTAATACGAAGGTGAGGTCTGGGATGC TGCGTGCGGCGCGACGACAGGAGGTATGACCTGGGTGGGGTCAGGGAAAGTCTTAGCTGAGAACTAAGAGATGAG ATCGGCACTAGCGGGTTGGGGGTGGTGGGGGTGCTGGCAGCCTCAGGAGCGATCGCTCCCCTGGAGAGGGTGA TTGAGTGTGGAGATCACCGGGGCCGCCGCGGGCCGTCTGCACTTCTGTTCCAGGTTTTTCTGGCATTTTCTGTTC CAGGTTTCTTCCACCCACGAGCACTTTATTCTCCTCCGAGACCCCCTTTTCTTCCCCTTCCTCTCCCACCAGG GCCCTCCAAGAGGCTCCCTCCTGTCTCTAAGTCAATTCCACCCCTCCTCGAAGTCCCGGCTTCCACCCCTCTCCT CAGAGTCCCGGCGTTTACCTCGTGGTGTTTTGCCTTGGGCCTTTCATGCCCCGGCTGCACACATCGTCTGTGAA TTGTGGCTGTTCACTCCCGAGGATGTGTCCTAGACTCCGGGTCGCGTGGATCTACCCTCTAGTTTACTTGCTCGG GAGAAGAAACTGACTCGTTTTATTTAGTGCCTATTTAGCGAGCCCAGAGTAACGTACATTTGTGCTGTTTTCAAT TTTGTGCTATCGCAAATCACAAAAAACTGTTATCAATTCACATTCATCATCAGCACGAGACCCATTTCCTTGTG CTCCTGCCAGCTCAGGATATTATGTTTCTTTTTTCATTTTTGCCAGTCTGTTAAGTAAAATGTCATATGCGTTTG TTTTAA

PCT/US2003/028547

1805/6881 FIGURE 1674

MPHSVTLRGPSPWGFRLVGGRDFSAPLTISRVHAGSKAALAALCPGDLIQAINGESTELMTHLEAQNRIKGCHDH LTLSVSRPEGRSWPSAPDDSKAQAHRIHIDPEIQDGSPTTSRRPSGTGTGPEDGRPSLGSPYGQPPRFPVPHNGS SEATLPAQMSTLHVSPPPSADPARGLPRSRDCRVDLGSEVYRMLREPAEPVAAEPKQSGSFRYLQGMLEAGEGGD WPGPGGPRNLKPTASKLGAPLSGLQGLPECTRCGHGIVGTIVKARDKLYHPECFMCSDCGLNLKQRGYFFLDERLYCESHAKARVKPPEGYDVVAVYPNAKVELV

PCT/US2003/028547

FIGURE 1675

CGGCAACCTCTGCCTTCTTCCACTCGGAGTCGCGCTCCGCGCGCCCTCACTGCAGCCCCTGCGTCGCC GGGACCCTCGCGCGCGACCGCCGAATCGCTCCTGCAGCAGAGCCAACATGCCCATCACTCGGATGCGCATGAGAC CCTGGCTAGAGATGCAGATTAATTCCAACCAAATCCCGGGGCTCATCTGGATTAATAAAGAGGAGATGATCTTCC TTCACACAGGCCGATACAAAGCAGGGGAAAAGGAGCCAGATCCCAAGACGTGGAAGGCCAACTTTCGCTGTGCCA TGAACTCCCTGCCAGATATCGAGGAGGTGAAAGACCAGAGCAGGAACAAGGGCAGCTCAGCTGTGCGAGTGTACC CCAAGAGGAAGTCATGTGGGGATTCCAGCCCTGATACCTTCTCTGATGGACTCAGCAGCTCCACTCTGCCTGATG ACCACAGCAGCTACACAGTTCCAGGCTACATGCAGGACTTGGAGGTGGAGCAGGCCCTGACTCCAGCACTGTCGC CATGTGCTGTCAGCAGCACTCTCCCCGACTGGCACATCCCAGTGGAAGTTGTGCCGGACAGCACCAGTGATCTGT ACAACTTCCAGGTGTCACCCATGCCCTCCACCTCTGAAGCTACAACAGATGAGGATGAGGAAGGGAAATTACCTG AGGACATCATGAAGCTCTTGGAGCAGTCGGAGTGGCAGCCAACAAACGTGGATGGGAAGGGGTACCTACTCAATG AACCTGGAGTCCAGCCCACCTCTGTCTATGGAGACTTTAGCTGTAAGGAGGAGCCAGAAATTGACAGCCCAGGGG TGACCCCAGTCCGGTTGCCCTCCATCCAGGCCATTCCCTGTGCACCGTAGCAGGGCCCCTGGGCCCCTCTTATTC CTCTAGGCAAGCAGGACCTGGCATCATGGTGGATATGGTGCAGAGAAGCTGGACTTCTGTGGGCCCCTCAACAGC AGTGTCTGGGTTTTTCTTGTGGTGTAAAGCTGGCCCTGCCTCCTGGGAAGATGAGGTTCTGAGACCAGTGTATCA GGTCAGGGACTTGGACAGGAGTCAGTGTCTGGCTTTTTCCTCTGAGCCCAGCTGCCTGGAGAGAGGGTCTCGCTGTC AAGAGAAAATTGCACTAAATGAATCTCGTTCCCAAAGAACTACCCCCTTTTCAGCTGAGCCCTGGGGACTGTTCC AAAGCCAGTGAAATGTGAAGGAAAGTGGGGTCCTTCGGGGCGATGCTCCCTCAGCCTCAGAGGAGCTCTACCCTG CTCCCTGCTTTGGCTGAGGGGCTTGGGAAAAAACTTGGCACTTTTTCGTGTGGATCTTGCCACATTTCTGATCA GAGGTGTACACTAACATTTCCCCCGAGCTCTTGGCCTTTGCATTTATTATACAGTGCCTTGCTCGGCGCCCACC AAATGTCATCTAACCATTAAGTCATGTGTGAACACATAAGGACGTGTGTAAATATGTACATTTGTCTTTTTATAA AAAGTAAATTGTT

PCT/US2003/028547

1807/6881 FIGURE 1676

MPITRMRMRPWLEMQINSNQIPGLIWINKEEMIFQIPWKHAAKHGWDINKDACLFRSWAIHTGRYKAGEKEPDPK
TWKANFRCAMNSLPDIEEVKDQSRNKGSSAVRVYRMLPPLTKNQRKERKSKSSRDAKSKAKRKSCGDSSPDTFSD
GLSSSTLPDDHSSYTVPGYMQDLEVEQALTPALSPCAVSSTLPDWHIPVEVVPDSTSDLYNFQVSPMPSTSEATT
DEDEEGKLPEDIMKLLEQSEWQPTNVDGKGYLLNEPGVQPTSVYGDFSCKEEPEIDSPGGDIGLSLQRVFTDLKN
MDATWLDSLLTPVRLPSIQAIPCAP

PCT/US2003/028547

1808/6881 FIGURE 1677

GCCGCTCGCTCCGCTCCCTGGCTCGGCTCCCTGCCTCCGCGTCGCAGCCCCCGCCGTAGCCGCCTCCGAG $\verb|CCCGCCGCCACATCCTCTGAGAAG| \textbf{ATG} \\ | CCCGCCGCCACGTATGCCGATCTTGGCAAATCTGCCAGGGATGTC| \\ | CCCGCCGCCACATCTTGGCAAATCTGCCAGGGATGTC| \\ | CCCGCCGCCACGTATGCCGATCTTGGCAAATCTGCCAGGGATGTC| \\ | CCCGCCGCCACGTATGCCGATCTTGGCCAAATCTGCCAGGGATGTC| \\ | CCCGCCGCCACGTATGCCAACTCTTGGCCAAATCTGCCAGGGATGTC| \\ | CCCGCCGCCACGTATGCCGATCTTGGCCAAATCTGCCAGGGATGTC| \\ | CCCGCCGCCACGTATGCCACGTATGCCAAATCTGCCAGGGATGTC| \\ | CCCGCCGCACGTATGCCACGTATGCCAAATCTGCCAGGGATGTC| \\ | CCCGCCGCACGTATGCCACGTATGCCAAATCTGCCAGGGATGTC| \\ | CCCGCCGCACGTATGCCACGTATGCCAAATCTGCCAGGGATGTC| \\ | CCCGCCGCCACGTATGCCACGTATGCCAAATCTGCCAGGGATGTC| \\ | CCCGCCGCCACGTATGCCACCCACGTATGCCAAATCTGCCAAATCTGCCAGGGATGTC| \\ | CCCGCCGCACGTATGCCACCCACGTATGCCAACTCTCACGTATGCCAAATCTGCCAAATCTGCCAAGGGATGTC| \\ | CCCGCCGCACGTATGCCACGTATGCCAAATCTGCCAAATCTGCCAAATCTGCCAAATCTGCCAAATCTGCCAAATCTGCCAAATCTGCCAAATCTGCCAAATCTGCAAATCTGCCAAATCTGCAAAATCTGCAAATCTGCAAATCTGCAAATCTGCAAATCTGCAAATCTGCAAATCTGCAAATCTGCAAAATCTGCAAATCTGAAATCTGCAAATCTGCAAATCTGAAA$ TTCACCAAGGGCTATGGATTTGGCTTAATAAAGCTTGATTTGAAAACAAAATCTGAGAATGGATTGGAATTTACA AGCTCAGGCTCAGCCAACACTGAGACCACCAAAGTGACGGGCAGTCTGGAAACCAAGTACAGATGGACTGAGTAC GGCCTGACGTTTACAGAGAAATGGAATACCGACAATACACTAGGCACCGAGATTACTGTGGAAGATCAGCTTGCA TACAAGCGGGAGCACATTAACCTGGGCTGCGACATGGATTTCGACATTGCTGGGCCTTCCATCCGGGGTGCTCTG GTGCTAGGTTACGAGGGCTGGCTGGCCGGCTACCAGATGAATTTTGAGACTGCAAAATCCCGAGTGACCCAGAGC AACTTTGCAGTTGGCTACAAGACTGATGAATTCCAGCTTCACACTAATGTGAATGACGGGACAGAGTTTGGCGGC TCCATTTACCAGAAAGTGAACAAGAAGTTGGAGACCGCTGTCAATCTTGCCTGGACAGCAGGAAACAGTAACACG CGCTTCGGAATAGCAGCCAAGTATCAGATTGACCCTGACGCCTGCTTCTCGGCTAAAGTGAACAACTCCAGCCTG ATAGGTTTAGGATACACTCAGACTCTAAAGCCAGGTATTAAACTGACACTGTCAGCTCTTCTGGATGGCAAGAAC GTCAATGCTGGTGGCCACAAGCTTGGTCTAGGACTGGAATTTCAAGCATAATGAATACTGTACAATTGTTTAAT TTTAAACTATTTTGCAGCATAGCTACCTTCAGAATTTAGTGTATCTTTTAATGTTGTATGTCTGGGATGCAAGTA TTGCTAAATATGTTAGCCCTCCAGGTTAAAGTTGATTCAGCTTTAAGATGTTACCCTTCCAGAGGTACAGAAGAA ACCTATTTCCAAAAAAGGTCCTTTCAGTGGTAGACTCGGGGAGAACTTGGTGGCCCCTTTGAGATGCCAGGTTTC TTTTTTATCTAGAAATGGCTGCAAGTGGAAGCGGATAATATGTAGGCACTTTGTAAATTCATATTGAGTAAATGA ATGAAATTGTGATTTCCTGAGAATCGAACCTTGGTTCCCTAACCCTAATTGATGAGAGGCTCGCTGCTTGATGGT GTGTACAAACTCACCTGAATGGGACTTTTTTAGACAGATCTTCATGACCTGTTCCCACCCCAGTTCATCATCATCATC TCTTTTACACCAAAAGGTCTGCAGGGTGTGGTAACTGTTTCTTTTGTGCCATTTTGGGGTGGAGAAGGTGGATGT AGCTTCCAGGAGCTCCAGCTATAAGCTTGGAAGTGTCTGTGTGATTGTAATCACATGGTGACAACACTCAGAATC TAAATTGGACTTCTGTTGTATTCTCACCACTCAATTTGTTTTTTAGCAGTTTAATGGGTACATTTTAGAGTCTTC CATTTTGTTGGAATTAGATCCTCCCCTTCAAATGCTGTAATTAACAACACTTAAAAAAACTTGAATAAAATATTGA **AACCTC**

PCT/US2003/028547

1809/6881 FIGURE 1678

 $\label{thmanup} \textbf{MAVPPTYADLGKSARDVFTKGYGFGLIKLDLKTKSENGLEFTSSGSANTETTKVTGSLETKYRWTEYGLTFTEKW\\ \textbf{NTDNTLGTEITVEDQLARGLKLTFDSSFSPNTGKKNAKIKTGYKREHINLGCDMDFDIAGPSIRGALVLGYEGWL\\ \textbf{AGYQMNFETAKSRVTQSNFAVGYKTDEFQLHTNVNDGTEFGGSIYQKVNKKLETAVNLAWTAGNSNTRFGIAAKY\\ QIDPDACFSAKVNNSSLIGLGYTQTLKPGIKLTLSALLDGKNVNAGGHKLGLGLEFQA$

PCT/US2003/028547

FIGURE 1679

PCT/US2003/028547

1811/6881 FIGURE 1680

MPSIQLQSFDGEIFAVDVEIAKQSVTIKTTLEDLGMDDEGDDPVPLPNVNAAVLKKVIQWCTHHKDDPPPPEDDE NKEKQTDDIPVWDQEFLKVAQGTLFELIRAANYLDIKGLLDVTCKTVANMIKGKTPEEIRKTFNIKNDFTEEEEA QVRKENQWCEEK WO 2004/030615 PCT/US2003/028547

1812/6881 FIGURE 1681A

CGCTGGGATGGCCGCCACAGCTGTAGGTGCTGCTAGTGTTTAGCGCTGGTCTTTGCCGGGCGTTGAGGGCAGCTC ${\tt AGCCTCCTTGTTTGTCCGGTTCGCCTGTGCGTGGTACTCAAGGGCACCAGTATTCCCGCGGTCGGCAGC{\tt AT}{\tt GGGT}$ CGGGAGTCACGCCACTATCGAAAACGATCGGCATCCCGGGGTCGCTCTGGAAGTCGGTCTAGAAGTCGCTCACCC AGAAGCCGAGAGCGAAGAAGATCTCGAAGTAGAGACAGGAGACGCTCAAGGAGTAGAAGCCGGGGCCGGCGATCC CGATCCTCCAGTCCTGGAAATAAAAGCAAGAAAACTGAGAATAGATCTAGGTCCAAAGAGAAAACTGATGGTGGG GAAAGTTCTAAAGAGAAAAAAAAGACAAAGATGACAAGGAGGATGAAAAAAGAAAAAGATGCTGGCAACTTTGAC GCTATGGAAAACATAGGAGAACTGAAAAAGGAAATCGAAGAGATGAAACAAGGGAAAAAGTGGAGTTTAGAGGAC GATGATGATGACGAAGATGATCCTGCAGAAGCTGAAAAGGAGGGAAATGAAATGGAGGGTGAGGAGTTAGATCCA TTAGATGCTTACATGGAAGAAGTGAAAGAGGAAGTAAAAAAATTTAACATGAGAAGTGTAAAAAGGTGGTGGGGGA AATGAAAAGAGTCTGGGCCAACGGTCACAAAAGTTGTCACTGTTGTGACAACCAAAAAAGCAGTTGTGGATTCT GATAAGAAGAAGGTGAGCTGATGGAGAATGACCAGGATGCCATGGAGTATTCTTCAGAGGAGGAAGAAGTTGAT CTTCAGACAGCCCTTACAGGGTATCAAACAAACAGCGAAAGCTTCTAGAACCAGTTGATCATGGAAAAATTGAG TATGAGCCATTTAGGAAAAACTTCTATGTTGAAGTTCCAGAACTAGCAAAAATGTCTCAAGAAGAGGTAAATGTG TTTCGATTGGAAATGGAGGGCATTACAGTTAAAGGAAAAGGTTGCCCCAAACCAATTAAATCCTGGGTCCAGTGT GGAATTTCCATGAAGATCTTAAATTCCCTCAAGAAGCATGGCTATGAAAAGCCCACGCCCATCCAAACCCAAGCT ATTCCTGCTATAATGTCTGGACGAGATTTGATTGGCATTGCCAAAACAGGAAGTGGAAAGACCATTGCTTTTCTG CCAACTCGAGAACTGGCTTTACAGATTACTAAAGAGTGTAAGAAGTTTTCCAAGACTTTGGGACTTAGAGTGGTC TGTGTTTACGGAGGAACAGGAATCAGTGAGCAGATTGCTGAGCTGAAAAGAGGTGCTGAAATTATTGTTTGCACA CCTGGTCGAATGATTGACATGTTAGCCGCTAACAGTGGTCGGGTCACAAATCTTCGAAGAGTGACATATGTTGTT TTAGATGAAGCAGACAGAATGTTTGACATGGGTTTTGAACCCCAGGTCATGCGCATCGTGGATAATGTTCGTCCT GATCGACAGACGGTTATGTTTTCAGCTACTTTCCCCAGAGCTATGGAGGCTTTGGCTCGCAGGATCCTCAGTAAA CCTATTGAAGTACAAGTTGGAGGCAGGAGTGTGGTTTGCTCAGATGTGGAGCAACAAGTGATTGTGATTGAAGAA GAAAAGAAATTCTTGAAGTTACTTGAGCTTCTAGGCCATTATCAAGAGTCAGGATCTGTCATTATATTTGTGGAT AAGCAGGAACATGCTGATGGTCTTCTTAAGGATTTAATGAGAGCATCTTATCCTTGCATGTCTCTTCATGGAGGC ATTGATCAATATGACAGAGATAGCATCATAAATGACTTTAAGAATGGGACCTGCAAACTTCTTGTGGCTACCTCT GTTGCTGCCCGAGGTCTAGATGTGAAACATCTGATTCTTGTAGTAAATTATAGCTGCCCCAACCATTATGAGGAT TATGTACACAGAGCAGGGCGGACTGGAAGAGCAGGAAACAAGGGTTATGCTTATACTTTTATCACAGAGGATCAA GCTCGCTATGCTGGTGACATAATTAAAGCTCTTGAATTGTCAGGGACTGCAGTACCTCCTGATTTAGAGAAACTG TGGAGTGATTTCAAAGATCAGCAGAAAGCTGAGGGGAAAATAATTAAAAAGAGTAGTGGGTTCTCTGGTAAGGGA TTCAAGTTTGATGAAACAGAACAAGCTTTGGCTAATGAGAGGAAGAAGTTACAAAAAGCAGCTCTTGGTCTACAA GATTCAGATGATGAGGATGCTGCAGTTGATATTGATGAGCAAATTGAAAGCATGTTTAATTCAAAGAAGAGAGTA AAGGATATGCTCCTGGAACATCAAGTGTTCCTGCTCCAACTGCAGGAAATGCTGAGAAATTAGAAATTGCT AAGAGATTGGCTCTTAGAATCAATGCCCAGAAGAATTTGGGCATCGAGTCTCAGGTAGATGTGATGCAGCAGGCC ACCAATGCAATTCTTAGGGGTGGCACCATTCTGGCTCCCACTGTTTCTGCAAAAACCATTGCAGAACAACTTGCT GAAAAGATCAATGCCAAGCTCAATTATGTGCCGTTAGAGAAACAAGAAGAAGAAGAAGACAGGATGGTGGACAGAAT GAATCTTTTAAGAGATATGAAGAAGAATTAGAGATCAATGACTTCCCACAGACTGCTAGGTGGAAAGTTACCTCT AAGGAAGCTCTGCAGAGAATCAGTGAATACTCTGAAGCCGCAATTACAATCAGAGGAACCTACTTCCCTCCTGGC AAAGAACCCAAGGAAGGCGAGCGGAAGATTTACTTGGCAATTGAAAGTGCCAATGAACTGGCTGTGCAGAAAGCA TCTGCAGTTTACAATGTATTGTAAATGAAGATTTTTTAAATTCTATCTTGCTGATTTTTTTAAATATAAGAAAC AGAGTATGATGTCCTTTAATGTAAACTCAAATATCAATATTTTAAATGTCCGGATAATATTCTAGAGGTTTAAAA AATGGAAATATTTGAACTTTCTATTGAAGACAATAAAGTACACAAGTCGTTAAGGGGCTATTCACTTTATCCTGT

PCT/US2003/028547

1813/6881 FIGURE 1681B

 ${\tt ACTTTCAATGAAATTGTGATCATTTCCTAAGAAAAGGTAAAATTCACTATCATATTTTGTGTCCCCACCTTGATGTACATGACTCTGGAACAATATGAACTGGATTTAAGAATGTTATAATAGAAGTCTTACAAAAATGG}$

PCT/US2003/028547

1814/6881 FIGURE 1682

MGRESRHYRKRSASRGRSGSRSRSRSPSDKRSKRGDDRRSRSRDRDRRRERSRSRDKRRSRSRDKRLRRSRSRE
RDRSRERRRSRSRDRRRSRSRSRGRRSRSSSPGNKSKKTENRSRSKEKTDGGESSKEKKKDKDDKEDEKEKDAGN
FDQNKLEEEMRKRKERVEKWREEQRKKAMENIGELKKEIEEMKQGKKWSLEDDDDDEDDPAEAEKEGNEMEGEEL
DPLDAYMEEVKEEVKKFNMRSVKGGGGNEKKSGPTVTKVVTVVTTKKAVVDSDKKKGELMENDQDAMEYSSEEEE
VDLQTALTGYQTKQRKLLEPVDHGKIEYEPFRKNFYVEVPELAKMSQEEVNVFRLEMEGITVKGKGCPKPIKSWV
QCGISMKILNSLKKHGYEKPTPIQTQAIPAIMSGRDLIGIAKTGSGKTIAFLLPMFRHIMDQRSLEEGEGPIAVI
MTPTRELALQITKECKKFSKTLGLRVVCVYGGTGISEQIAELKRGAEIIVCTPGRMIDMLAANSGRVTNLRRVTY
VVLDEADRMFDMGFEPQVMRIVDNVRPDRQTVMFSATFPRAMEALARRILSKPIEVQVGGRSVVCSDVEQQVIVI
EEEKKFLKLLELLGHYQESGSVIIFVDKQEHADGLLKDLMRASYPCMSLHGGIDQYDRDSIINDFKNGTCKLLVA
TSVAARGLDVKHLILVVNYSCPNHYEDYVHRAGRTGRAGNKGYAYTFITEDQARYAGDIIKALELSGTAVPPDLE
KLWSDFKDQQKAEGKIIKKSSGFSGKGFKFDETEQALANERKKLQKAALGLQDSDDEDAAVDIDEQIESMFNSKK
RVKDMAAPGTSSVPAPTAGNAEKLEIAKRLALRINAQKNLGIESQVDVMQQATNAILRGGTILAPTVSAKTIAEQ
LAEKINAKLNYVPLEKQEEERQDGGQNESFKRYEEELEINDFPQTARWKVTSKEALQRISEYSEAAITIRGTYFP
PGKEPKEGERKIYLAIESANELAVQKAKAEITRLIKEELIRLQNSYQPTNKGRYKVL

PCT/US2003/028547

FIGURE 1683A

GCTGCGGCTCCGCTCGCCAACGAGATCTTTCGAGATCTTCTCCGCCCCCGCTACCGGCGCCTCCTCTGCGG CCACTGAGCCGGAGCCGGCCTGAGCAGCGCTCTCGGTTGCAGTACCCACTGGAAGGACTTAGGCGCTCGCGTGGA CACCGCAAGCCCCTCAGTAGCCTCGGCCCAAGAGGCCTGCTTTCCACTCGCTAGCCCCGCCGGGGGTCCGTGTCC TTCCAGAGCTGCTACGTCGCTGTGGCCCGCCGCGCGCGCATCGAGACTATCGCTAATGAGTATAGCGACCGCTGC ACGCCGGCTTGCATTTCTTTTGGTCCTAAGAATCGTTCAATTGGAGCAGCAGCTAAAAGCCAGGTAATTTCTAAT GCAAAGAACACAGTCCAAGGATTTAAAAGATTCCATGGCCGAGCATTCTCTGATCCATTTGTGGAGGCAGAAAAA TCTAACCTTGCATATGATATTGTGCAGTTGCCTACAGGATTAACAGGTATAAAGGTGACATATATGGAGGAAGAG CGAAATTTTACCACTGAGCAAGTGACTGCCATGCTTTTGTCCAAACTGAAGGAGACAGCCGAAAGTGTTCTTAAG AAGCAGGATCTTCCTGCCTTAGAAGAGAAACCAAGAAATGTAGTTTTTTGTAGACATGGGCCACTCTGCTTATCAA GTTTCTGTATGTGCATTTAATAGAGGAAAACTGAAAGTTCTGGCCACTGCATTTGACACGACATTGGGAGGTAGA AAATTTGATGAAGTGTTAGTAAATCACTTCTGTGAAGAATTTGGGAAGAAATACAAGCTAGACATTAAGTCCAAA ATCCGTGCATTATTACGACTCTCCAGGAGTGTGAGAAACTCAAGAAATTGATGAGTGCAAATGCTTCAGATCTC CCTTTGAGCATTGAATGTTTTATGAATGATGTTGATGTATCTGGAACTATGAATAGAGGCAAATTTCTGGAGATG ATTTATGCAGTGGAGATAGTTGGTGGTGCTACACGAATCCCTGCGGTAAAAGAGAAGATCAGCAAATTTTTCGGT AAAGAACTTAGTACAACATTAAATGCTGATGAAGCTGTCACTCGAGGCTGTGCATTGCAGTGTGCCATCTTATCG CCTGCTTTCAAAGTCAGAGAATTTTCTATCACTGATGTAGTACCATATCCAATATCTCTGAGATGGAATTCTCCA GCTGAAGAAGGGTCAAGTGACTGTGAAGTCTTTTCCAAAAATCATGCTGCTCCTTTCTCTAAAGTTCTTACATTT TATAGAAAGGAACCTTTCACTCTTGAGGCCTACTACAGCTCTCCTCAGGATTTGCCCTATCCAGATCCTGCTATA GCTCAGTTTTCAGTTCAGAAAGTCACTCCTCAGTCTGATGGCTCCAGTTCAAAAGTGAAAGTCAAAGTTCGAGTA AATGTCCATGGCATTTTCAGTGTGTCCAGTGCATCTTTAGTGGAGGTTCACAAGTCTGAGGAAAATGAGGAGCCA ATGGAAACAGATCAGAATGCAAAGGAGGAAGAAGATGCAAGTGGACCAGGAGGAACCACATGTTGAAGAGCAA CAGCAGCAGACACCAGCAGAAAATAAGGCAGAGTCTGAAGAAATGGAGACCTCTCAAGCTGGATCCAAGGATAAA AAGATGGACCAACCACCCCAAGCCAAGAAGGCAAAAGTGAAGACCAGTACTGTGGACCTGCCAATCGAGAATCAG CTATTATGGCAGATAGACAGAGAGATGCTCAACTTGTACATTGAAAATGAGGGTAAGATGATCATGCAGGATAAA CTGGAGAAGGAGCGGAATGATGCTAAGAACGCAGTGGAGGAATATGTGTATGAAATGAGAGACAAGCTTAGTGGT GAATATGAGAAGTTTGTGAGTGAAGATGATCGTAACAGTTTTACTTTGAAACTGGAAGATACTGAAAATTGGTTG TATGAGGATGGAGAAGACCAGCCAAAGCAAGTTTATGTTGATAAGTTGGCTGAATTAAAAAAATCTAGGTCAACCT ATTAAGATACGTTTCCAGGAATCTGAAGAACGACCAAAATTATTTGAAGAACTAGGGAAACAGATCCAACAGTAT ATGAAAATAATCAGCTCTTTCAAAAACAAGGAGGACCAGTATGATCATTTGGATGCTGCTGACATGACAAAGGTA GAAAAAAGCACAAATGAAGCAATGGAGTGGATGAATAACAAGCTAAATCTGCAGAACAAGCAGAGTTTGACCATG GATCCAGTTGTCAAGTCAAAAGAGATTGAAGCTAAAATTAAGGAGCTGACAAGTACTTGTAGCCCTATAATTTCA GGAGACAACCCAGGCCCCCAGGCTGCTGAGCAGGGTACAGACACAGCTGTGCCTTCGGATTCAGACAAGAAGCTT CCTGAAATGGACATTGAT<u>TGA</u>TTCCAACACTTGTTTCTATTAAAACAGACTATTATAAAGCTTTAAGTTGTCAAC TTTGTTCTAAATATCAACTAGCGCAAGTGAATACTGAAGATTTCTTAGTCAGTTTTTAGGGGGATTTTCGGGGAGG GGAAATAGGTAATGTATGGAGCATTTTCACTTCTAAATAGTTAGATACAGAAATTAAGTGCATTGTATCTTTTTC ATAATGGTACTATTTAGAAGCCCAGTTAGTCTTACTGAGCTTATGCTTCACTCCTTTATGTTTAACCATGTGTCT ACAAGAATAAGTTTGTTTTGGAAAGTTGAGCTATAGCTACAGCTCTAGCTATCCAGCAGACTTTTCATTATGACT GGATGGGGTCCCCCTCTTTGTGAGGGCTGGAGCATGGCACGGCATGGATTAACACGGCAGAGGAACAAAGGTGTG TATAAATGCCATGTACTTCTCTTGGGAAAATAGACCCCCTTGCCTAGAGTAAGTTGTTAACTGAGGGCTTTAAAC CTGGAGGCTCTTCCTGAAAGTATGTTCATGAATACCCCAAGCATCAAGGTCTAAATAATTTTCAGAAGATTAGAA TTGGGTAGATATACTGTTGGATATAGCCATGGTAAATTTAACTGAGGAATTAAATCCTTGTTAATTTTGGTGTAA

PCT/US2003/028547

FIGURE 1683B

AGATTTGTATCCTGGCCTGTTTATTCAGGTGGGAGATGTTCTGTATAATTTTGAGGTATAGCTTGAACTCCTAGA ACAAGAGTTAAAAGTTCTTTTTAGCTCATTCACAATCACTTGTGTGTTAAGTGTTAATATCTGTCATGAACCTGC GAAATTAGTGTTAAAGAAGTGTGGTGCCTGATGTTATAACAACACCTCATTCTTAACTGTGTGGCCAATGTCAGG TATACCAAAGCATTCCTCTGACTGCTTTTTGGGGCAGTGTTGACAGGAGTGAGGCATTTTGGAAACTCCAAGGGA AGCCTGTGTTTGAGGCCAGAGTTGGTACCTGCTTTAAGAAACTGTTACAGGGCTTGTTGGTAATGTTTTGAATCT TTGTAAAAATTGATATCTGTATAACAGAGTGCCTCTCTGTTACTTTTGGCCTATGTTAGAAATAAGATGCT ATCTTGCATAGTTAGAATTAAGCGTTTGTCCATCTCTAGATAACATTGAAAAGTTTGAGTGTTACAGGCTCTAAA CCTCGAGGCACCACAACAAGGCCAGGTTCTTAGCACATCCTCTGTTCTCTACCTGTCATGCTTCAAGAGTTCCAG GGTGTGTGTGTGTGTGTGTGGGGAAGGGTGTGGGTGCTGGGATGGGGGTGAATTTCAAGTTGAAACACGATGA TGTGGTCTGCTTGCTCTGCTTAGACAGGCTTTAAGACCAATTGGATTTTCATGGAGGCCAGGACAGAGAGTGG TAATTGATGGCTTGTGTACAGACAAGCATTTATCCAGGTTGCGTTATCCAAACTGATTTGTTAAAGCTCCAGGTC ACGTTCTTACACTAAGAAAATCATTCAGTAAACATGAGACAAGTTTAGGAAAAACTAATAAAATAAACCTGTCTT AAACTTG

PCT/US2003/028547

1817/6881 FIGURE 1684

MSVVGIDLGFQSCYVAVARAGGIETIANEYSDRCTPACISFGPKNRSIGAAAKSQVISNAKNTVQGFKRFHGRAF SDPFVEAEKSNLAYDIVQLPTGLTGIKVTYMEEERNFTTEQVTAMLLSKLKETAESVLKKPVVDCVVSVPCFYTD AERRSVMDATQIAGLNCLRLMNETTAVALAYGIYKQDLPALEEKPRNVVFVDMGHSAYQVSVCAFNRGKLKVLAT AFDTTLGGRKFDEVLVNHFCEEFGKKYKLDIKSKIRALLRLSQECEKLKKLMSANASDLPLSIECFMNDVDVSGT MNRGKFLEMCNDLLARVEPPLRSVLEQTKLKKEDIYAVEIVGGATRIPAVKEKISKFFGKELSTTLNADEAVTRG CALQCAILSPAFKVREFSITDVVPYPISLRWNSPAEEGSSDCEVFSKNHAAPFSKVLTFYRKEPFTLEAYYSSPQ DLPYPDPAIAQFSVQKVTPQSDGSSSKVKVKVRVNVHGIFSVSSASLVEVHKSEENEEPMETDQNAKEEEKMQVD QEEPHVEEQQQQTPAENKAESEEMETSQAGSKDKKMDQPPQAKKAKVKTSTVDLPIENQLLWQIDREMLNLYIEN EGKMIMQDKLEKERNDAKNAVEEYVYEMRDKLSGEYEKFVSEDDRNSFTLKLEDTENWLYEDGEDQPKQVYVDKL AELKNLGQPIKIRFQESEERPKLFEELGKQIQQYMKIISSFKNKEDQYDHLDAADMTKVEKSTNEAMEWMNNKLN LQNKQSLTMDPVVKSKEIEAKIKELTSTCSPIISKPKPKVEPPKEEQKNAEQNGPVDGQGDNPGPQAAEQGTDTA VPSDSDKKLPEMDID

PCT/US2003/028547

FIGURE 1685

GACTGTCTACATTAGTAATTCCCAACTTGGGTCCGAAAGTGAACTTTTGCTGAAGCGAAGTAGCTAACCGCTTCC ATGTGCAAGGCAGGTTCCAGACTTCGGGGTGAGGAGGATTAACTGAAGGACCCCAGGGGAACCGGTGTGCTCACT ${\tt GATCCGCCTCCAGGGCCACCGCC} \underline{{\tt ATG}} {\tt TCGAGCCGCGGTGGGAAGAAGAAGTCCACCAAGACGTCCAGGTCTGCCA}$ AAGCAGGAGTCATCTTTCCCGTGGGGCGGATGCTGCGGTACATCAAGAAAGGCCACCCCAAGTACAGGATTGGAG AGCTGCTAAAAGGAGTCACCATAGCCAGTGGGGGTGTGTTACCCAACATCCACCCCGAGTTGCTAGCGAAGAAGC GGGGATCCAAAGGAAAGTTGGAAGCCATCATCACACCACCCCAGCCAAAAAGGCCAAGTCTCCATCCCAGAAAA AGCCTGTATCTAAAAAAGCAGGAGGCAAGAAAGGGGCCCGGAAATCCAAGAAGCAGGGTGAAGTCAGTAAGGCAG CCAGCGCCGACAGCACAACCGAGGGCACACCTGCCGACGGCTTCACAGTCCTCTCCACCAAGAGCCTCTTCCTTG CCAATGCTGACATTGACCTTAAAGATGACCTAGGAAACACGCTGGAGAAGAAAGGTGGCAAGGAGTTTGTGGAAG CTGTCCTGGAACTCCGGAAAAAGAACGGGCCCTTGGAAGTAGCTGGAGCTGCTGTCAGCGCAGGCCATGGCCTGC CTGCCAAGTTTGTGATCCACTGTAATAGTCCAGTTTGGGGTGCAGACAAGTGTGAAGAACTTCTGGAAAAGACAG ACGGTTTTCCAAAGCAGACAGCAGCTCAGCTGATTCTGAAGGCCATCTCCAGTTACTTCGTGTCTACAATGTCCT CTTCCATCAAAACGGTGTACTTCGTGCTTTTTGACAGCGAGAGTATAGGCATCTATGTGCAGGAAATGGCCAAGC AATCCCCTTCACTCCTACTGGGAGGTGGGACCCCTTTCATTTTCAGTTTTGCTCATCTAGGGAAAATAAGGCTTT GGTTTCCAGTTTAATTGTTTTTGACCTTCTAAAATGTTTTTATGTTAGCACTGATAGTTGGCATTACTGTTGTTA AGCACTGTGTTCCAGACCGTGTCTGACTTAGTGTAACCTAGGAGATTTTATAGTTTTATTTTAATGAAACCCTGA TTGACGCACAGCAGTGGGGAGAACAGCGTCTTTTACCTGTCACCGAAGCCAGGAAGCCCCGTTTGTAAGCGTGTG TTGTGGTGCTTTATTGTACATCCTCCAGTGGCGTTCTTTTTACTCTAATGTTCTTTTGGTTTCCCCCCTCAGAAG AATCATGAATTTGCAACAGACCTAATTTTTGGTTACTTTTTGTCTTATTGATGGATTTGAAAATGAAAGATTTAA TAAGGCAAAGCAGAATCTGTTGTCCTTAATTATATTTGCAATTTGGAATTTGTGTGAGTTGATTTAGTAAAATGT

WO 2004/030615 PCT/US2003/028547

FIGURE 1686

MSSRGGKKKSTKTSRSAKAGVIFPVGRMLRYIKKGHPKYRIGVGAPVYMAAVLEYLTAEILELAGNAARDNKKGR VTPRHILLAVANDEELNQLLKGVTIASGGVLPNIHPELLAKKRGSKGKLEAIITPPPAKKAKSPSQKKPVSKKAG GKKGARKSKKQGEVSKAASADSTTEGTPADGFTVLSTKSLFLGQKLNLIHSEISNLAGFEVEAIINPTNADIDLK DDLGNTLEKKGGKEFVEAVLELRKKNGPLEVAGAAVSAGHGLPAKFVIHCNSPVWGADKCEELLEKTVKNCLALA DDKKLKSIAFPSIGSGRNGFPKQTAAQLILKAISSYFVSTMSSSIKTVYFVLFDSESIGIYVQEMAKLDAN

PCT/US2003/028547

1820/6881 FIGURE 1687

CCCGTCGGTGAGCGGCGGGGGTGGCTCCAGCAACGGCTGGGCCCAAGCTGTGTAGAGGCCTTAACCAACGATAAC GGCGGCGACGGCGAAACCTCGGAGCTCGCAGGGCGGGGGCAAGGCCCGGGCCTTGGAGAATTCTCAGTT GACTCTGACGGACTGCGTGGTGGTGAATCCCCAGACCAAGCGCTCCCGTTGCTTTGGCTTCGTGACCTACTC CAATGTGGAGGAGGCGGACGCCCATGGCCGCCTCGCCCCATGCCGTGGACGCCAACACTGTGGAGCTGAAGCG GGCGGTGTCCCGGGAGGATTCGGCGCGCGCCCGGTGCCCACGCCAAGGTTAAGAAGCTCTTTGTCGGAGGCCTTAA AGGAGACGTGGCTGAGGGCGACCTGATCGAGCACTTCTCGCAGTTTGGCACCGTGGAAAAGGCCGAGATTATTGC CGACAAGCAGTCCGGCAAGAAGCGTGGATTCGGCTTCGTGTATTTCCAGAATCACGACGCGGCAGACAAGGCCGC GGTGGTCAAGTTCCATCCGATTCAGGGCCATCGCGTGGAGGTGAAGAAAGCAGTCCCCAAGGAGGATATCTACTC CGGTGGGGGTGGAGGCGCTCCCGATCCTCCCGGGGCGGCCGAGGCGGCGGGGGGGCGGCGGTGGTCGAGACCA CAATGCCTACGGAGGCGGCGGCGGCGGTTCGTCCTACGGTGGGAGCGACTACGGTAACGGCTTCGGCGGCTTCGG CAGCTACAGCCAGCATCAGTCCTCCTATGGGCCCATGAAGAGCGGCGGCGGCGGCGGCGGCGGCGGCAGTAGCTG GGGCGGTCGCAGTAATAGTGGACCTTACAGAGGCGGCTATGGCGGTGGGGGTGGCTATGGAGGCAGCTCCTTC**TA AAAGAAAATTTAAAATGCCTGGGAGTGGCTATAGGGGTAGCTCTTTCCAACAGCCCAAGTGGGGTCAACTCCTAA** GCCCCACCCCTCACACACCCCCTTCCCTGTTTTGCCCTTGGGGGGAGCCACTTCTAAGGCTGCTTACCCTTGG GGGTGTTCCTCTATTTGCCTGCCACCTCTCTTGTCTCTCCCTCTGAAGATGGACTCGGCCCCACATACACATTTT TGTGTTACAGTCATTGATGGACTCTATTTTTTATTATTACTTGGACCTTGGTCGTTTTTATACTAGCAAAATGT TTGGGGTGGGGGGTAGTTTACTTTGTTAAGGACTTGATAACCTGGCTACAGCGTTTTCTATGAAATCTACTTG GATCCCATGCCTGAAATTTGGAAGCATATGTACACAAATCATTTTTACGTTTTATTTTTAATAAATCATTGTGTT **TGACCGTA**

PCT/US2003/028547

1821/6881 FIGURE 1688

MENSQLCKLFIGGLNVQTSESGLRGHFEAFGTLTDCVVVVNPQTKRSRCFGFVTYSNVEEADAAMAASPHAVDGN TVELKRAVSREDSARPGAHAKVKKLFVGGLKGDVAEGDLIEHFSQFGTVEKAEIIADKQSGKKRGFGFVYFQNHD AADKAAVVKFHPIQGHRVEVKKAVPKEDIYSGGGGGGSRSSRGGRGGGRGGGRDQNGLSKGGGGGYNSYGGYGG GGGGGYNAYGGGGGGSSYGGSDYGNGFGGFGSYSQHQSSYGPMKSGGGGGGGSSWGGRSNSGPYRGGYGGGGGY GGSSF

PCT/US2003/028547

FIGURE 1689

CCAGCCTCCGCAGCCGCGCGCCCCCCCCCCCCCGCGCCAGGGCGAGTCGGGGTCGCCCCGCCTGCACGCTTCT CAGTGTTCCCCGCGCCCCGCATGTAACCCGGCCAGGCCCCGCAACGGTGTCCCCTGCAGCTCCAGCCCCGGGCT ATGTCCCCGCTGCAGATCTCTGACCCGTTCGGATCCTTTCCTCACTCGCCCACCATGGACAACTACCCTAAGCTG GAGGAGATGATGCTGCTGAGCAACGGGGCTCCCCAGTTCCTCGGCGCCCCGGGGCCCCAGAGGGCAGCGCAGC TTCAACCCTCAGGCGGACACGGGCGAGCAGCCCTACGAGCACCTGACCGCAGAGTCTTTTCCTGACATCTCTCTG AACAACGAGAAGGTGCTGGTGGAGACCAGTTACCCCAGCCAAACCACTCGACTGCCCCCCATCACCTATACTGGC CGCTTTTCCCTGGAGCCTGCACCCAACAGTGGCAACACCTTGTGGCCCGAGCCCCTCTTCAGCTTGGTCAGTGGC CTAGTGAGCATGACCAACCCACCGGCCTCCTCGTCCTCAGCACCATCTCCAGCGGCCTCCTCCGCCTCC ACGCCGAACACTGACATTTTCCCTGAGCCACAAAGCCAGGCCTTCCCGGGCTCGGCAGGGACAGCGCTCCAGTAC CCGCCTCCTGCCTACCCTGCCGCCAAGGGTGGCTTCCAGGTTCCCATGATCCCCGACTACCTGTTTCCACAGCAG CAGGGGGATCTGGGCCTGGGCACCCAGACCAGAAGCCCTTCCAGGGCCTGGAGAGCCGCACCCAGCAGCCTTCG CTAACCCCTCTGTCTACTATTAAGGCCTTTGCCACTCAGTCGGGCTCCCAGGACCTGAAGGCCCTCAATACCAGC CGCCCTTACGCTTGCCCAGTGGAGTCCTGTGATCGCCGCTTCTCCCGCTCCGACGAGCTCACCCGCCACATCCGC ATCCACACAGGCCAGAAGCCCTTCCAGTGCCGCATCTGCATGCGCAACTTCAGCCGCAGCGACCACCTCACCACC CACATCCGCACCCACACAGGCGAAAAGCCCTTCGCCTGCGACATCTGTGGAAGAAGTTTGCCAGGAGCGATGAA CGCAAGAGGCATACCAAGATCCACTTGCGGCAGAAGGACAAGAAAGCAGACAAAAGTGTTGTGGCCTCTTCGGCC CCGGCCACCACCTCATACCCATCCCTGTGCCCACCTCCTTCTCCTCTCCCGGCTCCTCGACCTACCCATCCCCT GTGCACAGTGGCTTCCCCTCCCGTCGGTGGCCACCACGTACTCCTCTGTTCCCCCCTGCTTTCCCGGCCCAGGTC 'AGCAGCTTCCCTCAGCTGTCACCAACTCCTTCAGCGCCTCCACAGGGCTTTCGGACATGACAGCAACCTTT QTTAAAGGACAGGAGGAGGATGGCCATAGGAGGAGGGTTCCTCTTAGGTCAGATGGAGGTTCTCAGAGCCA AGTCCTCCCTCTCTACTGGAGTGGAAGGTCTATTGGCCAACAATCCTTTCTGCCCACTTCCCCTTCCCCAATTAC TATTCCCTTTGACTTCAGCTGCCTGAAACAGCCATGTCCAAGTTCTTCACCTCTATCCAAAGAACTTGATTTGCA TGGATTTTGGATAAATCATTTCAGTATCATCTCCATCATATGCCTGACCCCTTGCTCCCTTCAATGCTAGAAAAT CGAGTTGGCAAAATGGGGTTTGGGCCCTCAGAGCCCTGCCCTGCACCCTTGTACAGTGTCTGTGCCATGGATTT CGTTTTTCTTGGGGTACTCTTGATGTGAAGATAATTTGCATATTCTATTGTATTATTTGGAGTTAGGTCCTCACT TGGGGGAAAAAAAAAAAAAAGCCAAGCAAACCAATGGTGATCCTCTATTTTGTGATGATGCTGTGACAATAAG TTTGAACCTTTTTTTTTGAAACAGCAGTCCCAGTATTCTCAGAGCATGTGTCAGAGTGTTGTTCCGTTAACCTTT TYTTTCTTCGTCCTTTTGGTTTAAAAAGTTTCACGTCTTGGTGCCTTTTGTGTGATGCCCCTTGCTGATGGCTT GACATGTGCAATTGTGAGGGACATGCTCACCTCTAGCCTTAAGGGGGGGCAGGGAGTGATGATTTGGGGGAGGCTT TGGGAGCAAAATAAGGAAGAGGGCTGAGCTGAGCTTCGGTTCTCCAGAATGTAAGAAAACAAAATCTAAAACAAA ATC'IGAACTCTCAAAAGTCTATTTTTTTAACTGAAAATGTAAATTTATAAATATATTCAGGAGTTGGAATGTTGT AGTTACCTACTGAGTAGGCGGCGATTTTTGTATGTTATGAACATGCAGTTCATTATTTTGTGGTTCTATTTTACT TTGTACTTGTGTTTGCTTAAACAAAGTGACTGTTTGGCTTATAAACACATTGAATGCGCTTTATTGCCCATGGGA TATGTGGTGTATATCCTTCCAAAAATTAAAACGAAAATAAAGTAGCTGCGATTGGG

PCT/US2003/028547

1823/6881 FIGURE 1690

PCT/US2003/028547

1824/6881 FIGURE 1691

PCT/US2003/028547

1825/6881 FIGURE 1692

MARKAGNFYVPAEPKLAFVIRIRGINGVSPKPYKALPPGPRPIQGASFPARLAGGPRAGSPPGAQHALPEVFQRP QPGTSSHTGLRASPAALP

PCT/US2003/028547

FIGURE 1693

GGCACGAGGGGAGCGCTTGTTTGCTGCCTCGTACTCCTCCATTTATCCGCCATGATAAGTGCCAGCCGAGCTGCA AGTCATGAGGCTTTTAGACTTGTTTCAAGGCGGGATTATGCATCAGAAGCAATCAAGGGAGCAGTTGTTGGTATT GATTTGGGTACTACCAACTCCTGCGTGGCAGTTATGGAAGGTAAACGAGCAAAGGTGCTGGAGAATGCCGAAGGT GCCAGAACCACCCCTTCAGTTGTGGCCTTTACAGCAGATGGTGAGCGACTTGTTGGAATGCCGGCCAAGCGACAG GCTGTCACCAACCCAACAATACATTTTATGCTACCAAGCGTCTCATTGGCCGGCGATATGATGATCCTGAAGTA CAGAAAGACATTAAAAATGTTCCCTTTAAAATTGTCCGTGCCTCCAATGGTGATGCCTGGGTTGAGGCTCATGGG AAATTGTATTCTCCGAGTCAGATTGGAGCATTTGTGTTGATGAAGATGAAAGAGACTGCAGAAAATTACTTGGGG CGCACAGCAAAAAATGCTGTGATCACAGTCCCAGCTTATTTCAATGACTCGCAGAGACAGGCCACTAAAGATGCT GGCCAGATATCTGGACTGAATGTGCTTCGGGTGATTAATGAGCCCACAGCTGCTGCTCTTGCCTATGGTCTAGAC AAATCAGAAGACAAAGTCATTGCTGTATATGATTTAGGTGGTGGAACTTTTGATATTTCTATCCTGGAAATTCAG AAAGGAGTATTTGAGGTGAAATCCACAAATGGGGATACCTTCTTAGGTGGGGAAGACTTTGACCAGGCCTTGCTA CGGCACATTGTGAAGGAGTTCAAGAGAGAGACAGGGGTTGATTTGACTAAAGACAACATGGCACTTCAGAGGGTA CGGGAAGCTGCTGAAAAGGCTAAGTGTGAACTCTCCTCATCTGTGCAGACTGACATCAATTTGCCCTATCTTACA ATGGATTCTTCTGGACCCAAGCATTTGAATATGAAGTTGACCCGTGCTCAATTTGAAGGGATTGTCACTGATCTA ATCAGAAGGACTATCGCTCCATGCCAAAAAGCTATGCAAGATGCAGAAGTCAGCAAGAGTGACATAGGAGAAGTG ATTCTTGTGGGTGGCATGACTAGGATGCCCAAGGTTCAGCAGACTGTACAGGATCTTTTTGGCAGAGCCCCAAGT AAAGCTGTCAATCCTGATGAGGCTGTGGCCATTGGAGCTGCCATTCAGGGAGGTGTGTTGGCCGGCGATGTCACG GATGTGCTGCTCCTTGATGTCACTCCCCTGTCTCTGGGTATTGAAACTCTAGGAGGTGTCTTTACCAAACTTATT ' AATAGGAATACCACTATTCCAACCAAGAAGAGCCAGGTATTCTCTACTGCCGCTGATGGTCAAACGCAAGTGGAA ATTAAAGTGTGTCAGGGTGAAAGAGAGATGGCTGGAGACAACAAACTCCTTGGACAGTTTACTTTGATTGGAATT CCACCAGCCCCTCGTGGAGTTCCTCAGATTGAAGTTACATTTGACATTGATGCCAATGGGATAGTACATGTTTCT GCTAAAGATAAAGGCACAGGACGTGAGCAGCAGATTGTAATCCAGTCTTCTGGTGGATTAAGCAAAGATGATATT GAAAATATGGTTAAAAATGCAGAGAAATATGCTGAAGAAGACCGGCGAAAGAAGGAACGAGTTGAAGCAGTTAAT ATGGCTGAAGGAATCATTCACGACACAGAAACCAAGATGGAAGAATTCAAGGACCAATTACCTGCTGATGAGTGC AACAAGCTGAAAGAAGAGATTTCCAAAATGAGGGAGCTCCTGGCTAGAAAAGACAGCGAAACAGGAGAAAATATT AGACAGGCAGCATCCTCTCCAGCAGGCATCATTGAAGCTGTTCGAAATGGCATACAAAAAGATGGCATCTGAG CGAGAAGGCTCTGGAAGTTCTGGCACTGGGGAACAAAAGGAAGATCAAAAGGAGGAAAAACAG<u>TAA</u>TAATAGCAG AAATTTTGAAGCCAGAAGGACAACATATGAAGCTTAGGAGTGAAGAGACTTCCTGAGCAGAAATGGGCGAACTTC AGTCTTTTTACTGTGTTTTTGCAGTATTCTATATATATTTCCTTAATTTGTAAATTTAGTGACCATTAGCTAGT GATCATTTAATGGACAGTGATTCTAACAGTATAAAGTTCACAATATTCTATGTCCCTAGCCTGTCATTTTTCAGC TGCATGTAAAAGGAGGTAGGATGAATTGATCATTATAAAGATTTAACTATTTTATGCTGAAGTGACCATATTTTC AAGGGGTGAAACCATCTCGCACACAGCAATGAAGGTAGTCATCCATAGACTTGAAATGAGACCACATATGGGGAT GTCAAGCTGGCTGTGCCATGTTTGTAGATGGGGCAGAGGAATCTAGAACAATGGGAAACTTAGCTATTTATATTA GGTACAGCTATTAAAACAAGGTAGGAATGAGGCTAGACCTTTAACTTCCCTAAGGCATACTTTTCTAGCTACCTT AATACAGAAAGCATCTTGAAAAAAAAAAAAAAAAAAA

PCT/US2003/028547

FIGURE 1694

MISASRAAARLVGAAASRGPTAARHQDSWNGLSHEAFRLVSRRDYASEAIKGAVVGIDLGTTNSCVAVMEGKRA KVLENAEGARTTPSVVAFTADGERLVGMPAKRQAVTNPNNTFYATKRLIGRRYDDPEVQKDIKNVPFKIVRASNG DAWVEAHGKLYSPSQIGAFVLMKMKETAENYLGRTAKNAVITVPAYFNDSQRQATKDAGQISGLNVLRVINEPTA AALAYGLDKSEDKVIAVYDLGGGTFDISILEIQKGVFEVKSTNGDTFLGGEDFDQALLRHIVKEFKRETGVDLTK DNMALQRVREAAEKAKCELSSSVQTDINLPYLTMDSSGPKHLNMKLTRAQFEGIVTDLIRRTIAPCQKAMQDAEV SKSDIGEVILVGGMTRMPKVQQTVQDLFGRAPSKAVNPDEAVAIGAAIQGGVLAGDVTDVLLLDVTPLSLGIETL GGVFTKLINRNTTIPTKKSQVFSTAADGQTQVEIKVCQGEREMAGDNKLLGQFTLIGIPPAPRGVPQIEVTFDID ANGIVHVSAKDKGTGREQQIVIQSSGGLSKDDIENMVKNAEKYAEEDRRKKERVEAVNMAEGIIHDTETKMEEFK DQLPADECNKLKEEISKMRELLARKDSETGENIRQAASSLQQASLKLFEMAYKKMASEREGSGSSGTGEQKEDQK EEKQ

PCT/US2003/028547

1828/6881 FIGURE 1695

GAAATGACTGCTGTCCATGCAGGCAACATAAACTTCAAGTGGGATCCTAAAAGTCTAGAGATCAGGACTCTGGCA GTTGAGAGACTGTTGGAGCCTCTTGTTACACAGGTTACAACCCTTGTAAACACCAATAGTAAAGGGCCCTCTAAT AAGAAGAGGTCGTTCTAAGAAGGCCCATGTTTTGGCTGCATCTGTTGAACAAGCAACTGAGAATTTCTTGGAG AAGGGGGATAAAATTGCGAAGGAGACCAGTTTCTCAAGGAGGAGCTTGTGGCTGCTGTAGAAGATGTTCGAAAA CAAGGTGATTTGATGAAGGCTGCTGCAGGAGAGTTCGCAGATGATCCCTGCTCTTCTGTGAAGCGAGGCAACATG GTTCGGGCAGCTCGAGCTTTGCTCTCTGCTGTTACCCGGTTGCTGATTTTGGCTGACATGGCAGATGTCTACAAA TTACTTGTTCAGCTGAAAGTTGTGGAAGATGGTATCTTGAAGTTGAGGAATGCTGGCAATGAACAAGACTTAGGA ATCCAGTATAAAGCCCTAAAACCTGAAGTGGATAAGCTGAACATTATGGCAGCCAAAAGACAACAGGAATTGAAA GATGTTGGCCATCGTGATCAGATGGCTGCAGCTAGAGGAATCCTGCAGAAGAACGTTCCGATCCTATACTGCA TCCCAGGCATGCCTACAGCACCCTGATGTCGCAGCCTATAAGGCCCAACAGGGACCTGATATACAAGCAGCTGCAG CAGGCGGTCACAGGCATTTCCAATGCAGCCCAGGCCACTGCCTCAGACGATGCCTCACAGCACCAGGGTGGAGGA CGCTTTAGGCCTTCCCTGGAGGGCGTCTGGAAAGCATCATTAGTGGGGCTGCCTTGATGGCCGACTCGTCCTGC ACGCGTGATGACCGTCGTGAGCGAATTGTGGCAGAGTGTAATGCTGTCCGCCAGGCCCTGCAGGACCTGCTTTCG GAGTACATGGGCAATGCTGGACGTAAAGAAGAAGTGATGCACTCAATTCTGCAATAGATAAAATGACCAAGAAG ACCAGGGACTTGCGTAGACAGCTCCGCAAAGCTGTCATGGACCACGTTTCAGATTCTTTCCTGGAAACCAATGTT GAACATGCCAACAAATTGATTGAGGTTGCCAACTTGGCCTGTTCCATCTCAAATAATGAAGAAGGTGTAAAGCTT GTTCGAATGTCTGCAAGCCAGTTAGAAGCCCTCTGTCCTCAGGTTATTAATGCTGCACTGGCTTTAGCAGCAAAA CCACAGAGTAAACTGGCCCAAGAGAACATGGATCTTTTTAAAGAACAATGGGAAAAACAAGTCCGTGTTCTCACA GATGCTGTCGATGACATTACTTCCATTGATGACTTCTTGGCTGTCTCAGAGAATCACATTTTGGAAGATGTGAAC AAATGTGTCATTGCTCTCCAAGAGAAGGATGTGGATGGCCTGGACCGCACAGCTGGTGCAATTCGAGGCCGGGCA GCCCGGGTCATTCACGTAGTCACCTCAGAGATGGACAACTATGAGCCAGGAGTCTACACAGAGAAGGTTCTGGAA GCCACTAAGCTGCTCTCCAACACAGTCATGCCACGTTTTACTGAGCAAGTAGAAGCAGCCGTGGAAGCCCTCAGC TCGGACCCTGCCCAGCCCATGGATGAGAATGAGTTTATCGATGCTTCCCGCCTGGTATATGATGGCATCCGGGAC ATCAGGAAAGCAGTGCTGATGATAAGGACCCCTGAGGAGTTGGATGACTCTGACTTTGAGACAGAAGATTTTGAT GTCAGAAGCAGGACGAGCGTCCAGACAGAAGACGATCAGCTGATAGCTGGCCAGAGTGCCCGGGCGATCATGGCT CAGCTTCCCCAGGAGCAAAAAGCGAAGATTGCGGAACAGGTGGCCAGCTTCCAGGAAGAAAAAGAGCAAGCTGGAT GCTGAAGTGTCCAAATGGGACGACAGTGGCAATGACATCATTGTGCTGGCCAAGCAGATGTGCATGATTATGATG GAGATGACAGACTTTACCCGAGGTAAAGGACCACTCAAAAATACATCGGATGTCATCAGTGCTGCCAAGAAAATT GCTGAGGCAGGATCCAGGATGGACAAGCTTGGCCGCACCATTGCAGACCATTGCCCCGACTCGGCTTGCAAGCAG GACCTGCTGGCCTACCTGCAACGCATCGCCCTCTACTGCCACCAGCTGAACATCTGCAGCAAGGTCAAGGCCGAG GTGCAGAATCTCGGCGGGGAGCTTGTTGTCTCTGGGGTGGACAGCGCCATGTCCCTGATCCAGGCAGCCAAGAAC TTGATGAATGCTGTGGTGCAGACAGTGAAGGCATCCTACGTCGCCTCTACCAAATACCAAAAGTCACAGGGTATG CAGGATGAGACACAGACCAAGATTAAACGGGCATCTCAGAAGAAGCACGTGAACCCGGTGCAGGCCCTCAGCGAG ${\tt TTCAAAGCTATGGACAGCATC} \underline{{\tt TAA}}{\tt GTCTGCCCAGGCCGGCCGCCCCCCCCCCCCCCGGGGCTCCTGAATATCAGTCA}$ CTGTTCGTCACTCAAATGAATTTGCTAAATACAACACTGATACTAGATTCCACAGGGAAATGGGCAGACTGAACC AGTCCAGGTGGTGAATTTTCCAAGAACATAGTTTAAGTTGATTAAAAATGCTTTTAGAATGCAGGAGCCTACTTC TAGCTGTATTTTTTGTATGCTTAAATAAAAATAAAAATTCATAACCAAAGAGAATCCCACATTAGCTTGTTAGTA ATGCTCTGACCAAGCCGAGATGCCCATTCTCTTAGTGATGGCGGCGTTAGGGTTTGAGAAGAAGGGAATTTGGCTC AACTTCAGTTGAGAGGGTGCAGTCCAGACAGCTTGACTGCTTTTAAATGACCAAAGATGACCTGTGGTAAGCAAC AAAACATAATGTATCATGAAGAAAACTGATTCTCTATGACATGAAATGAAAATTTTAATGCATTGTTATAATTAC TAATGTACGCTGCTGCAGGACATTAATAAAGTTGCTTTTTTAGGCTACAGTGTCTCGATGCCATAATCAGAACAC ACTITTTTCCTCTCTCCCAGCTTCAAATGCAAATTCATCATTGGGCTCACTTCTAATAACTGCAGTGTTTCC CGCCTTGGGCTTGCAG

PCT/US2003/028547

1829/6881 FIGURE 1696

MTAVHAGNINFKWDPKSLEIRTLAVERLLEPLVTQVTTLVNTNSKGPSNKKRGRSKKAHVLAASVEQATENFLEK GDKIAKESQFLKEELVAAVEDVRKQGDLMKAAAGEFADDPCSSVKRGNMVRAARALLSAVTRLLILADMADVYKL LVQLKVVEDGILKLRNAGNEQDLGIQYKALKPEVDKLNIMAAKRQQELKDVGHRDQMAAARGILQKNVPILYTAS QACLQHPDVAAYKANRDLIYKQLQQAVTGISNAAQATASDDASQHQGGGGGELAYALNNFDKQIIVDPLSFSEER FRPSLEERLESIISGAALMADSSCTRDDRRERIVAECNAVRQALQDLLSEYMGNAGRKERSDALNSAIDKMTKKT RDLRRQLRKAVMDHVSDSFLETNVPLLVLIEAAKNGNEKEVKEYAQVFREHANKLIEVANLACSISNNEEGVKLV RMSASQLEALCPQVINAALALAAKPQSKLAQENMDLFKEQWEKQVRVLTDAVDDITSIDDFLAVSENHILEDVNK CVIALQEKDVDGLDRTAGAIRGRAARVIHVVTSEMDNYEPGVYTEKVLEATKLLSNTVMPRFTEQVEAAVEALSS DPAQPMDENEFIDASRLVYDGIRDIRKAVLMIRTPEELDDSDFETEDFDVRSRTSVQTEDDQLIAGQSARAIMAQ LPQEQKAKIAEQVASFQEEKSKLDAEVSKWDDSGNDIIVLAKQMCMIMMEMTDFTRGKGPLKNTSDVISAAKKIA EAGSRMDKLGRTIADHCPDSACKQDLLAYLQRIALYCHQLNICSKVKAEVQNLGGELVVSGVDSAMSLIQAAKNL MNAVVQTVKASYVASTKYQKSQGMASLNLPAVSWKMKAPEKKPLVKREKQDETQTKIKRASQKKHVNPVQALSEF KAMDSI

PCT/US2003/028547

1830/6881 FIGURE 1697

GAATTCGGGCGGGGTTTGTACTATCCTCGGTGCTGTGGTGCAGAGCTAGTTCCTCTCCAGCTCAGCCGCGTAGGT ${\tt TTGGACATATTTACTCTTTTCCCCCCAGGTTGAATTGACCAAAGCA} {\tt ATG} {\tt GTGATGGAGAAGCCTAGTCCCCTGCT}$ GGTCGGGCGGGAATTTGTGAGACAGTATTACACACTGCTGAACCAGGCCCCAGACATGCTGCATAGATTTTATGG AAAGAACTCTTCTTATGTCCATGGGGGATTGGATTCAAATGGAAAGCCAGCAGATGCAGTCTACGGACAGAAAGA AATCCACAGGAAAGTGATGTCACAAAACTTCACCAACTGCCACCAAGATTCGCCATGTTGATGCTCATGCCAC GCTAAATGATGGTGTGGTAGTCCAGGTGATGGGGCTTCTCTCTAACAACAACCAGGCTTTGAGGAGATTCATGCA TGAGGTCTTTGGTGGGTTTGTCACTGAGCCTCAGGAGGAGTCTGAAGAAGAAGTAGAGGAACCTGAAGAAGACA GCAAACACCTGAGGTGGTACCTGATGATTCTGGAACTTTCTATGATCAGGCAGTTGTCAGTAATGACATGGAAGA ACATTTAGAGGAGCCTGTTGCTGAACCAGAGCCTGATCCTGAACCAGAACCAGAACAAGAACCTGTATCTGAAAT CCAAGAGGAAAAGCCTGAGCCAGTATTAGAAGAAACTGCCCCTGAGGATGCTCAGAAGAGTTCTTCTCCAGCACC TGCAGACATAGCTCAGACAGTACAGGAAGACTTGAGGACATTTTCTTGGGCATCTGTGACCAGTAAGAATCTTCC ACCCAGTGGAGCTGTTCCAGTTACTGGGATACCACCTCATGTTGTTAAAGTACCAGCTTCACAGCCCCGTCCAGA TCCTCCCCAAAGGGGACCCAGACCAATCCGTGAGGCTGGTGAGCAAGGTGACATTGAACCCCGAAGAATGGTGAG ACACCCTGACAGTCACCAACTCTTCATTGGCAACCTGCCTCATGAAGTGGACAAATCAGAGCTTAAAGATTTCTT TCAAAGTTATGGAAACGTGGTGGAGTTGCGCATTAACAGTGGTGGGAAATTACCCAATTTTGGTTTTGTTGTTT TGATGATTCTGAGCCTGTTCAGAAAGTCCTTAGCAACAGGCCCATCATGTTCAGAGGTGAGGTCCGTCTGAATGT AGGTGGGCTGGGTGGAATGAGAGGCCCTCCCCGTGGAGGCATGGTGCAGAAACCAGGATTTGGAGTGGGAAG ${\tt GGGGCTTGCGCCACGGCAG}{\color{blue}{\textbf{TAA}}}{\tt TCTTCATGGATCTTCATGCAGCCATACAAACCCTGGTTCCAACAGAATGGTGA$ ATTTTCGACAGCCTTTGGTATCTTGGAGTATGACCCCAGTCTGTTATAAACTGCTTAAGTTTGTATAATTTTACT TTTTTTGTGTGTTAATGGTGTGTGCTCCCTCTCCCTCTCTCCCTTTCCTGACCTTTAGTCTTTCACTTCCAATT TTGTGGAATGATATTTTAGGAATAACGGACTTTTACCCGAATTC

PCT/US2003/028547

FIGURE 1698

MVMEKPSPLLVGREFVRQYYTLLNQAPDMLHRFYGKNSSYVHGGLDSNGKPADAVYGQKEIHRKVMSQNFTNCHT KIRHVDAHATLNDGVVVQVMGLLSNNNQALRRFMQTFVLAPEGSVANKFYVHNDIFRYQDEVFGGFVTEPQEESE EEVEEPEERQQTPEVVPDDSGTFYDQAVVSNDMEEHLEEPVAEPEPDPEPEPEQEPVSEIQEEKPEPVLEETAPE DAQKSSSPAPADIAQTVQEDLRTFSWASVTSKNLPPSGAVPVTGIPPHVVKVPASQPRPESKPESQIPPQRPQRD QRVREQRINIPPQRGPRPIREAGEQGDIEPRRMVRHPDSHQLFIGNLPHEVDKSELKDFFQSYGNVVELRINSGG KLPNFGFVVFDDSEPVQKVLSNRPIMFRGEVRLNVEEKKTRAAREGDRRDNRLRGPGGPRGGLGGGMRGPPRGGM VQKPGFGVGRGLAPRQ

PCT/US2003/028547

1832/6881 FIGURE 1699

PCT/US2003/028547

FIGURE 1700

GGAGAGCGCGCTCTGCCTGCCTGCCTGCCACTGAGGGTTCCCAGCACCATGAGGGCCTGGATCTTCTT TGGTGCAGAGGAAACCGAAGAGGGGGGGGGGGAAAATCCCTGCCAGAACCACCACTGCAAACACGGCAAGGT GTGCGAGCTGGATGAGAACAACACCCCCATGTGCGTGTGCCAGGACCCCACCAGCTGCCCAGCCCCCATTGGCGA GTTTGAGAAGGTGTGCAGCAATGACAACAAGACCTTCGACTCTTCCTGCCACTTCTTTGCCACAAAGTGCACCCT GGAGGGCACCAAGAGGGCCACAAGCTCCACCTGGACTACATCGGGCCTTGCAAATACATCCCCCCTTGCCTGGA CTCTGAGCTGACCGAATTCCCCCTGCGCATGCGGGACTGGCTCAAGAACGTCCTGGTCACCCTGTATGAGAGGGA TGAGGACAACAACCTTCTGACTGAGAAGCAGAAGCTGCGGGTGAAGAAGATCCATGAGAATGAGAAGCGCCTGGA GGCAGGAGACCACCCCGTGGAGCTGCCCGGGACTTCGAGAAGAACTATAACATGTACATCTTCCCTGTACA $\tt CTGGCAGTTCGGCCAGCTGGACCACCCCATTGACGGGTACCTCTCCCACACCGAGCTGGCTCCACTGCGTGC$ TCCCCTCATCCCCATGGAGCATTGCACCACCCGCTTTTTCGAGACCTGTGACCTGGACAATGACAAGTACATCGC CCTGGATGAGTGGGCCGGCTGCTTCGGCATCAAGCAGAAGGATATCGACAAGGATCTTGTGATCTAAATCCACTC CTTCCACAGTACCGGATTCTCTTTTAACCCTCCCCTTCGTGTTTCCCCCAATGTTTAAAATGTTTGGATGGTTT GTTGTTCTGCCTGGAGACAAGGTGCTAACATAGATTTAAGTGAATACATTAACGGTGCTAAAAATGAAAATTCTA ACCCAAGACATGACATTCTTAGCTGTAACTTAACTATTAAGGCCTTTTCCACACGCATTAATAGTCCCATTTTTC TCTTGCCATTTGTAGCTTTGCCCATTGTCTTATTGGCACATGGGTGGACACGGATCTGCTGGGCTCTGCCTTAAA CACACATTGCAGCTTCAACTTTTCTCTTTAGTGTTCTGTTTGAAACTAATACTTACCGAGTCAGACTTTGTGTTC ATTTCATTTCAGGGTCTTGGCTGCCTGTGGGCTTCCCCAGGTGGCCTGGAGGTGGCCAAAGGGAAGTAACAGACA AACGTGGTTTGCCTGAGGCTGTAACTGAGAGAAAGATTCTGGGGCTGTGTTATGAAAATATAGACATTCTCACAT AAGCCCAGTTCATCACCATTTCCTCCTTTACCTTTCAGTGCAGTTTCTTTTCACATTAGGCTGTTGGTTCAAACT TTTGGGAGCACGGACTGTCAGTTCTCTGGGAAGTGGTCAGCGCATCCTGCAGGGCTTCTCCTCCTCTGTCTTTTG GAGAACCAGGGCTCTTCTCAGGGGCTCTAGGGACTGCCAGGCTGTTTCAGCCAGGAAGGCCAAAATCAAGAGTGA GATGTAGAAAGTTGTAAAATAGAAAAAGTGGAGTTGGTGAATCGGTTGTTCTTTCCTCACATTTGGATGAITGTC ATAAGGTTTTTAGCATGTTCCTCCTTTTCTTCACCCTCCCCTTTTTTCTTCTATTAATCAAGAGAAACTTCAAAG TTAATGGGATGGTCGGATCTCACAGGCTGAGAACTCGTTCACCTCCAAGCATTTCATGAAAAAGCTGCTTCTTAT TAATCATACAAACTCTCACCATGATGTGAAGAGTTTCACAAATCCTTCAAAATAAAAAGTAATGACTTAGAAACT G

PCT/US2003/028547

1834/6881 FIGURE 1701

TTCCCAGGCTTTGACCCCAACCAGGATGCCGAGGCTCTGTACACTGCCATGAAGGGCTTTGGCAGTGACAAGGAG GCCATACTGGACATAATCACCTCACGGAGCAACAGGCAGAGGCAGGAGGTCTGCCAGAGCTACAAGTCCCTCTAC GGCAAGGACCTCATTGCTGATTTAAAGTATGAATTGACGGGCAAGTTTGAACGGTTGATTGTGGGCCTGATGAGG CCACCTGCCTATTGTGATGCCAAAGAAATTAAAGATGCCATCTCGGGCATTGGCACTGATGAGAAGTGCCTCATT GAGATCTTGGCTTCCCGGACCAATGAGCAGATGCACCAGCTGGTGGCAGCATACAAAGATGCCTACGAGCGGGAC CTGGAGGCTGACATCATCGGCGACACCTCTGGCCACTTCCAGAAGATGCTTGTGGTCCTGCTCCAGGGAACCAGG GAGGAGGATGACGTAGTGAGCGAGGACCTGGTACAACAGGATGTCCAGGACCTATACGAGGCAGGGGAACTGAAA GAGTATCTGAAGACCACAGGGAAGCCGATTGAAGCCAGCATCCGAGGGGAGCTGTCTGGGGACTTTGAGAAGCTA ATGCTGGCCGTAGTGAAGTGTATCCGGAGCACCCCGGAATATTTTGCTGAAAGGCTCTTCAAGGCTATGAAGGGC ATCTTCCGGACCAAGTATGAGAAGTCCCTCTACAGCATGATCAAGAATGACACCTCTGGCGAGTACAAGAAGACT CTGCTGAAGCTGTCTGGGGGAGATGATGATGCTGCTGGCCAGTTCTTCCCGGAGGCAGCGCAGGTGGCCTATCAG ATGTGGGAACTTAGTGCAGTGGCCCGAGTAGAGCTGAAGGGAACTGTGCGCCCAATGACTTCAACCCTGAC GCAGATGCCAAAGCGCTGCGGAAAGCCATGAAGGGACTCGGGACTGACGAAGACACAATCATCGATATCATCACG CTGAAGTCTGAGATCTCTGGAGACCTGGCAAGGCTGATTCTGGGGCTCATGATGCCACCGGCCCATTACGATGCC AAGCAGTTGAAGAAGGCCATGGAGGGAGCCGGCACAGATGAAAAGGCTCTTATTGAAATCCTGGCCACTCGGACC AATGCTGAAATCCGGGCCATCAATGAGGCCTATAAGGAGGACTATCACAAGTCCCTGGAGGATGCTCTGAGCTCA GACACATCTGGCCACTTCAGGAGGATCCTCATTTCTCTGGCCACGGGGCATCGTGAGGAGGAGGAGAAAACCTG GACCAGGCACGGGAAGATGCCCAGGTGGCTGCTGAGATCTTGGAAATAGCAGACACACCTAGTGGAGACAAAACT TCCTTGGAGACACGTTTCATGACGATCCTGTGTACCCGGAGCTATCCGCACCTCCGGAGAGTCTTCCAGGAGTTC ATCAAGATGACCAACTATGACGTGGAGCACACCATCAAGAAGGAGATGTCTGGGGATGTCAGGGATGCATTTGTG GCCATTGTTCAAAGTGTCAAGAACAAGCCTCTCTTCTTTGCCGACAAACTTTACAAATCCATGAAGGGTGCTGGC ACAGATGAGAAGACTCTGACCAGGATCATGGTATCCCGCAGTGAGATTGACCTGCTCAACATCCGGAGGGAATTC ATTGAGAAATATGACAAGTCTCTCCACCAAGCCATTGAGGGTGACACCTCCGGAGACTTCCTGAAGGCCTTGCTG ${\tt GCTCTCTGTGGTGAGGACTAGGGCCACAGCTTTGGCGGGCACTTCTGCCAAGAAATGGTTATCAGCACCAGC}$ GCTCTTATCTTCAGTGGAGCTTAGGAAACGCTCCCACTCCCACGGGCCATCGAGGGCCCAGCACGGCTGAGCGGC TGAAAAACCGTAGCCATAGATCCTGTCCACCTCCACTCCCCTCTGACCCTCAGGCTTTCCCAGCTTCCTCCCCTT

PCT/US2003/028547

1835/6881 FIGURE 1702

CCTCGTCCTCGGCCCGGGTGCCCTGCCCCGTCCAGGAGCCCTAGGAGTGCTACGGGGGGCCGGAGCCTTGCCCG GGCCGCTGCCCCGTCCCTGGATTCGGGGCTGGACGCAGCAGCGGGGCGCTGTGTCCCCAAGCTCCCCGTCCTCG CAGCGGGCACAGGCAGGGGCTGAGCTACCCTCATCGAAGGGAGGAGCCGTACCGGATCTACGACCCTGGGGGCA GCGTGCCCTCAGGAGAGGCATCCGCAGCTTTTGAGCGCCTAGTGAAGGAGAATTCCCGGCTGAAGGAAAAAATGC AAGGGATAAAGATGTTAGGGGAGCTTTTGGAAGAGTCCCAGATGGAAGCGACCAGGCTCCGGCAGAAGGCAGAGG CAGGAAAGGACTCAAATGTCACAGCATCTCCCACAGCCCCTGCATGCCCCAGTGACAAGCCAGCACCAGTCCAGA AGCCTCCATCCAGTGGCACCTCCTCTGAATTTGAAGTGGTCACTCCTGAGGAGCAGAATTCACCAGAGAGCAGCA GCCATGCCAATGCGATGGCGCTGGGCCCCCTGCCCCGTGAGGACGGCAACCTGATGCTGCACCTGCAGCGCCTGG AGTTCAACCGACTGGCATCCAAGGTGCACAAGAATGAGCAGCGCACCTCCATTCTGCAGACCCTGTGTGAGCAGC TTCGGAAGGAGCACGCCTCTGAAGGCCAAGTTGGATAAGGGCCTGGAACAGCGGGATCAGGCTGCCGAGAGGC TGCGGGAGGAAAATTTGGAGCTCAAGAAGTTGTTGATGAGCAATGGCAACAAAGAGGGTGCGTCTGGGCGGCCAG GCTCACCGAAGATGGAAGGGACAGGCAAGAAGGCAGTGGCTGGACAGCAGCAGCTAGTGTGACGGCAGGTAAGG TCCCAGAGGTGGTGGCCTTGGGCGCACCCGAGAAGAAGGTGAAGATGCTGGAGCAGCAGCAGCGCAGTGAGCTGCTGG AAGTGAACAAGCAGTGGGACCAGCATTTCCGGTCCATGAAGCAGCAGTATGAGCAGAAGATCACTGAGCTGCGTC AGAAGCTGGCTGATTTGCAGAAGCAGGTGACTGACCTGGAGGCCGAGCGGGAGCAGAAGCAGCGTGACTTTGACC GCAAGCTCCTCGGCCAAGTCCAAGATTGAAATGGAGGAGCACCGACAAGGAGCAGCTGACAGCAGAGGCCAAGG AGCTGCGCCAAAAGGTCAAGTACCTGCAGGATCAGCTGAGCCCACTCACCCGACAGCGTGAGTACCAGGAAAAGG AGATCCAGCGGCTCAACAAGGCCCTGGAGGAAGCACTGAGCATCCAAACCCCGCCATCATCTCCACCAACAGCAT TTGGGAGCCCAGAAGGAGCAGGGGCCCTCCTAAGGAAACAGGAGCTGGTCACGCAGAATGAGTTGCTGAAACAGC TGAAGAAGCAAGTGGAGAACCTGCAGGCCCAGGTCACCCTGTCAAATGCCCAGCTAAAAGCATTCAAAGATGAGG AGAAGGCAAGAGAGCCCTCAGACAGCAGAAGAGGAAAGCAAAGGCCTCAGGAGAGCGTTACCATGTGGAGCCCC AGGACTGGTCCCAGATCCGCTACCCCCCTCCCCCATGGCCATGGAGCACCCGCCCCCACTCCCCAACTCGCGCC TCTTCCATCTGCCGGAATACACCTGGCGTCTACCCTGTGGAGGGGTTCGAAATCCAAATCAGAGCTCCCAAGTGA TGGACCCTCCCACAGCCAGGCCTACAGAACCAGAGTCTCCAAAAAATGACCGTGAGGGGCCTCAG<u>TGA</u>GACCAGA TTGTGTCATTTGGCTCCACCTTCATCTTGCAGAGCCAGCTGATCTCAATTGCCAAAAACTAGAAGCCACTTGCAC GGTGTGGCCAGAGCCTCAGCTGGATGAGAGGCTGAGATGGGTGGCCAGCTTGTACACCAGTCCCTGAACTGAGCT GTTTACAGGACTGGGGAGGCTCCACCCAGAAGGCTTTCATTTGTACTCTGCTGGGAGTGACTGGGAAAAACTCCT TCCCTGCTGCTGAGTGGAGAGGCCTCATCCGGCTTTGACCCCCATCCTTGCAGAAGCCTCCAGGAGCAGCAAT CCTAAGAGTGGGAGGCAGCCAAGACCCCCTTCCTTCAAAACCTCCCGGAAGTGGTTTCAGGCCCTCTAGTTGCCA TGACCAATTTGTGTGTGTTTTAATTTTTGCTTCAAGCTCTGTAGCAGGACCTGCCCCACGCACACCCCTACCCC TCTGTGAGGAGCTGTGGGAAGTGTGGGTTTGTCTCCAGAACAGAAGAGAATGATGGATATTCTGGCTCTGGGGCC AGGGGCGCCAGCCTGAAGCTGCCAGGCCCTGAGGTTCAGACCCTGGACCCCATAGCTGGAGGCCTGTGGTGCCAG AAGCCCAGATTAGGGTGGCTGTCCATCCCTGGATAGCTATTTGCACGAATCATGGACATAAATCCAAGTTG

PCT/US2003/028547

FIGURE 1703

MEGRGPYRIYDPGGSVPSGEASAAFERLVKENSRLKEKMQGIKMLGELLEESQMEATRLRQKAEELVKDNELLPP PSPSLGSFDPLAELTGKDSNVTASPTAPACPSDKPAPVQKPPSSGTSSEFEVVTPEEQNSPESSSHANAMALGPL PREDGNLMLHLQRLETTLSVCAEEPDHGQLFTHLGRMALEFNRLASKVHKNEQRTSILQTLCEQLRKENEALKAK LDKGLEQRDQAAERLREENLELKKLLMSNGNKEGASGRPGSPKMEGTGKKAVAGQQQASVTAGKVPEVVALGAPE KKVKMLEQQRSELLEVNKQWDQHFRSMKQQYEQKITELRQKLADLQKQVTDLEAEREQKQRDFDRKLLLAKSKIE MEETDKEQLTAEAKELRQKVKYLQDQLSPLTRQREYQEKEIQRLNKALEEALSIQTPPSSPPTAFGSPEGAGALL RKQELVTQNELLKQQVKIFEEDFQRERSDRERMNEEKEELKKQVEKLQAQVTLSNAQLKAFKDEEKAREALRQQK RKAKASGERYHVEPHPEHLCGAYPYAYPPMPAMVPHHGFEDWSQIRYPPPPMAMEHPPPLPNSRLFHLPEYTWRL PCGGVRNPNQSSQVMDPPTARPTEPESPKNDREGPQ

PCT/US2003/028547

FIGURE 1704

AGCCAAAAGAGGAAGGGACCGGCCTCCCACGTCCACAGGGACCTGACTTCCACCTCTCTGCCCAGATTTGCTTAT GCGATTGGCTGCAAGGGTCTCGGCTTGGCCGCGGATTAATCACACCCGAGGGCTTGAAAGGTGGCTGGGAGCGCC GGACACCTCAGACGGACGGTGGCCAGGGATCAGGCAGCGGCTCAGGCGACCCTGAGTGTGCCCCCACCCCGCCAT GCCCGGCTGCTGCAGGCGTCCTGCCTGCTTTCCCTGCTCCTGGCCGGCTTCGTCTCGCAGAGCCGGGGACAAGA GAAGTCGAAGATGGACTGCCATGGTGGCATAAGTGGCACCATTTACGAGTACGGAGCCCTCACCATTGATGGGGA GGAGTACATCCCCTTCAAGCAGTATGCTGGCAAATACGTCCTCTTTGTCAACGTGGCCAGCTACTGAGGCCTGAC GGGCCAGTACATTGAACTGAATGCACTACAGGAAGAGCTTGCACCATTCGGTCTGGTCATTCTGGGCTTTCCCTG AGGCTTTGTCCCTAATTTCCAGCTCTTTGAGAAAGGGGATGTCAATGGAGAGAAAGAGCAGAAATTCTACACTTT CCTAAAGAACTCCTGTCCTCCACCTCGGAGCTCCTGGGTACATCTGACCGCCTCTTCTGGGAACCCATGAAGGT TCACGACATCCGCTGGAACTTTGAGAAGTTCCTGGTGGGGCCAGATGGTATACCCATCATGCGCTGGCACCACCG GTAACTGAAGGCCGTCTCATCCCATGTCCACCATGTAGGGGAGGACTTTGTTCAGGAAGAAATCCGTGTCTCCA ACCACACTATCTACCCATCACAGACCCCTTTCCTATCACTCAAGGCCCCAGCCTGGCACAAATGGATGCATACAG TTCTGTGTACTGCCAGGCATGTGGGTGTGGGTGCAATGTGGGTGTTTACACACATGCCTACAGGTATGCGTGATT GTGTGTGTGTGCATGGGTGTACAGCCACGTGTCTACCTATGTGTCTTTCTGGGAATGTGTACCATCTGTGTGCCT GCAGCTGTGTAGTGCTGGACAGTGACAACCCTTTCTCTCCAGTTCTCCACTCCAATGATAATAGTTCACTTATAC CTAAACCCAAAGGAAAACCAGCTCTAGGTCCAATTGTTCTGCTCTAACTGATACCTCAACCTTGGGGCCAGCAT CTCCCACTGCCTCCAAATATTAGTAACTATGACTGACGTCCCCAGAAGTTTCTGGGTCTACCACACTCCCCAACC TCCCTGAGATCAACCAAGGCAGATGTGACAGCAAGGGCCACGGACCCCATGGCAGGGGTGGCGTCTTCATGAGGG AGGGGCCCAAAGCCCTTGTGGGCGGACCTCCCCTGAGCCTGTCTGAGGGGCCCAGCCCTTAGTGCATTCAGGCTAA GGCCCTGGGCAGGGATGCCACCCTGCTCCTTCGGAGGACGTGCCCTCACCCCTCACTGGTCCACTGGCTTGAG

PCT/US2003/028547

FIGURE 1705

MARLLQASCLLSLLLAGFVSQSRGQEKSKMDCHGGISGTIYEYGALTIDGEEYIPFKQYAGKYVLFVNVASYEGL TGQYIELNALQEELAPFGLVILGFPCNQFGKQEPGENSEILPTLKYVRPGGGFVPNFQLFEKGDVNGEKEQKFYT FLKNSCPPTSELLGTSDRLFWEPMKVHDIRWNFEKFLVGPDGIPIMRWHHRTTVSNVKMDILSYMRRQAALGVKR K

PCT/US2003/028547

1839/6881 FIGURE 1706

AGCCTCGGGGCTTGACGGGATTGTGGCGGTCCTCTCTCCCAATTCGGAAGCTACAGCTACCTCCGGACGCTCTCA AGATGCCGACCTCTCTGGGTTCCAACACCTACAACAGGCAGAACTGGGAGGATGCGGACTTCCCCATTCTGTGCC GGCCATTCACAGTGTTTCGCTGGTGCCCTGGAGTCCGCATGCGTTTCAAGAAGACTGAAGTGTGCCAAACCTGCA GTAAATTGAAGAATGTCTGTCAGACCTGCCTCTTAGACCTAGAGTATGGCCTGCCCATCCAGGTTCGTGACGCAG TTTCTAACTCTGATGGAACACGGCCAGTTGGCATGCTGGGGAAAGCCACATCTACCAGTGACATGCTGCTCAAAC TGGCCCGGACCACACCCTACTACAAAAGGAATCGACCCCACATTTGCTCCTTCTGGGTGAAAGGAGAGTGTAAGA GAGGAGGGAATGTCCATACAGACATGAGAAGCCTACAGATCCAGATGACCCCCTTGCTGATCAGAATATTAAAG ACCGTTATTACGGAATCAATGATCCTGTAGCTGACAAGCTTCTAAAGCGGGCTTCAACAATGCCTCGGCTGGACC CACCAGAGGATAAAACTATCACCACACTATATGTTGGTGGTCTAGGTGATACCATTACTGAGACAGATTTAAGAA ATCATTTCTACCAGTTCGGAGAGATCCGGACGATCACTGTTGTGCAGAGACAGCAGTGTGCTTTCATCCAGTTTG CCACACGCAGGCTGCAGAAGTGGCTGCTGAGAAGTCCTTTAATAAGTTGATTGTAAATGGCCGCAGACTGAATG TGAAATGGGGAAGATCCCAGGCAGCCAGAGGAAAAGAAAAAGAGAAGATGGAACTACAGACTCTGGGATCAAAC TAGAACCTGTTCCAGGATTGCCAGGAGCTCTTCCTCCTCCTCCTGCAGCAGAAGAAGAAGCCTCTGCCAACTACT CACCCCCAGGTTTTGGGCCACACATGTTCCACCCAATGGGACCACCCCCTCCTTTCATGCGGGCTCCAGGACCAA TCCACTATCCTTCTCAGGACCCTCAGAGGATGGGAGCTCATGCTGGAAAACACAGCAGCCCCTAGCACCTTGTCA CTTGTAGTTTCCATGGTAGCTGAATGTGCTCAGATGTGAGCAGTCAGAGACTGACAGCCATGCTTTCCTATACTT GTTCAAAGGATCGATGGACCGTAAATAAGCTGCCATTAACACATCTGGTTACTGCTGTAACATGACTAATAAAAC CGAACGCCTGTTCCCCTTACCCGTGTGGGGGACACGCAGATGAGTGAATTGGAATGTCCAGCAGAGTTACCCTCC CAATTATATGTTCATTTTGTATATTTTTTGGTCGGGGGAAAAATTGACCTGCAGTAAAAAAACCTTTGACCATTT TTATGTCCATTGGATACTTTCCTTTTTATCATCTTAAAAAAAGATAACTAGTACTAATCATTGTAGTGGCCTAAG TGTGATTTAACTCTTGAAGTCACACCCTCCGAAAGATGAGTAGAAACCAGCACCAGCACAGCCCAGATCTTCTCT ATAAAAATTCCTTTTTATTCCTGTCAACTGGATGGAAACACAAATTTCATGGAGCTGTGTACCATCGAAGAAACC TGGTGTCTGGCATGAAATTACTGTAAAGAACTTCCTGTAAAACACGTTCTTTAACAAACTGAAATGAAAAGCATT GGAGCGTCTGAATGAAGACGTGACCTCCTGCTGGGACTCTGATGGTCTTCAGCATTCACCTTCGTGTGTCTTCA GTGTCTCATTGTCATCCCTGCTTCTGTTTGGTCTTAGAGTGTTTGGATATAACTGAATTGTAGATGGTAAAGGAA ATTTGATGTGTTTTTTGTTTTTTAAATAATTAAAACGGGTCAATTTTT

PCT/US2003/028547

FIGURE 1707

MATSLGSNTYNRQNWEDADFPILCQTCLGENPYIRMTKEKYGKECKICARPFTVFRWCPGVRMRFKKTEVCQTCS KLKNVCQTCLLDLEYGLPIQVRDAGLSFKDDMPKSDVNKEYYTQNMEREISNSDGTRPVGMLGKATSTSDMLLKL ARTTPYYKRNRPHICSFWVKGECKRGEECPYRHEKPTDPDDPLADQNIKDRYYGINDPVADKLLKRASTMPRLDP PEDKTITTLYVGGLGDTITETDLRNHFYQFGEIRTITVVQRQQCAFIQFATRQAAEVAAEKSFNKLIVNGRRLNV KWGRSQAARGKEKEKDGTTDSGIKLEPVPGLPGALPPPPAAEEEASANYFNLPPSGPPAVVNIALPPPPGIAPPP PPGFGPHMFHPMGPPPPFMRAPGPIHYPSQDPQRMGAHAGKHSSP

PCT/US2003/028547

FIGURE 1708

PCT/US2003/028547

FIGURE 1709

MAPRKGKEKKEEQVISLGPQVAEGENVFGVCHIFASFNDTFVHVTDLSGKETICRVTGGMKVKADRDESSPYAAM LAAQDVAQRCKELGITALHIKLRATGGNRTKTPGPGAQSALRALARSGMKIGRIEDVTPIPSDSTRRKGGRRGRR L

PCT/US2003/028547

FIGURE 1710

ACCAAGTGGGCGGAGTGGCCTTCTGTGGACGAATCAGATTCCTCTCCAGCACCGACTTTAAGAGGCGAGCCGGGG GGTCAGGGTCCCAGATGCACAGGAGGAGAAGCAGGAGCTGTCGGGAAGATCAGAAGCCAGTCATGGATGACCAGC GCGACCTTATCTCCAACAATGAGCAACTGCCCATGCTGGGCCCGCGCCCCTGGGGCCCCGGAGAGCAAGTGCAGCC GCGGAGCCCTGTACACAGGCTTTTCCATCCTGGTGACTCTGCTCCTCGCTGGCCAGGCCACCACCGCCTACTTCC TGTACCAGCAGCAGGCCGGCTGGACAACTGACAGTCACCTCCCAGAACCTGCAGCTGGAGAACCTGCGCATGA AGCTTCCCAAGCCTCCCAAGCCTGTGAGCAAGATGCGCATGGCCACCCCGCTGCTGATGCAGGCGCTGCCCATGG GAGCCCTGCCCCAGGGGCCCATGCAGAATGCCACCAAGTATGGCAACATGACAGAGGACCATGTGATGCACCTGC TCCAGAATGCTGACCCCCTGAAGGTGTACCCGCCACTGAAGGGGAGCTTCCCGGAGAACCTGAGACACCTTAAGA ACACCATGGAGACCATAGACTGGAAGGTCTTTGAGAGCTGGATGCACCATTGGCTCCTGTTTGAAATGAGCAGGC ACTCCTTGGAGCAAAAGCCCACTGACGCTCCACCGAAAGTACTGACCAAGTGCCAGGAAGAGGTCAGCCACATCC CTGCTGTCCACCCGGGTTCATTCAGGCCCAAGTGCGACGACAACGGCAACTATCTGCCACTCCAGTGCTATGGGA GCATCGGCTACTGCTGGTGTCTTCCCCAACGGCACGGAGGTCCCCAACACCAGAAGCCGCGGGCACCATAACT GCAGTGAGTCACTGGAACTGGAGGACCCGTCTTCTGGGCTGGGTGTGACCAAGCAGGATCTGGGCCCAGTCCCCA TGTGAGAGCAGCAGAGGCGGTCTTCAACATCCTGCCAGCCCCACACAGCTACAGCTTTCTTGCTCCCTTCAGCCC CCAGCCCTCCCCCATCTCCCACCCTGTACCTCATCCCATGAGACCCTGGTGCCTGGCTCTTTCGTCACCCTTGG ACAAGACAAACCAAGTCGGAACAGCAGATAACAATGCAGCAAGGCCCTGCTGCCCAATCTCCATCTGTCAACAGG GGCGTGAGGTCCCAGGAAGTGGCCAAAAGCTAGACAGATCCCCGTTCCTGACATCACAGCAGCCTCCAACACAAG GCTCCAAGACCTAGGCTCATGGACGAGATGGGAAGGCACAGGGAGAAGGGATAACCCTACACCCAGACCCCAGGC TGGACATGCTGACTGTCCTCCCCTCCAGCCTTTGGCCTTGTCTTTCTAGCCTATTTACCTGCAGGCTGAGCC ACTCTCTCCCTTTCCCCAGCATCACTCCCCAAGGAAGAGCCAATGTTTTCCACCCATAATCCTTTCTGCCGACC CCTAGTTCCCTCTGCTCAGCCAAGCTTGTTATCAGCTTTCAGGGCCATGGTTCACATTAGAATAAAAGGTAGTAA TTAG

PCT/US2003/028547

1844/6881 FIGURE 1711

PCT/US2003/028547

1845/6881 FIGURE 1712A

AAGAGGAAGAGAGGAAGCGGAGGGAACTGCGGCCAGGCTAAAAGGGGGAAGAAGAGGGATCAGCCCAAGGAGGAGGA AGAGGAAAACAAGACAACAGCCAGTGCAGAGGAGGAGGAACGTGTGCCAGTGTCCCGATCCCTGCGGAGCTAGT AGGAGTTCTGCTGCTGCTGGTGGCCACAGCTTGGCATGGTCAGGGAATCCCAGTGATAGAGCCCAGTGTCCC TGAGCTGGTCGTGAAGCCAGGAGCAACGGTGACCTTGCGATGTGTGGGCAATGGCAGCGTGGAATGGGATGGCCC CCCATCACCTCACTGGACCCTGTACTCTGATGGCTCCAGCAGCATCCTCAGCACCAACAACGCTACCTTCCAAAA CACGGGGACCTATCGCTGCACTGAGCCTGGAGACCCCCTGGGAGGCAGCGCCGCCATCCACCTCTATGTCAAAGA CCCTGCCCGGCCCTGGAACGTGCTAGCACAGGAGGTGGTCGTGTTCGAGGACCAGGACGCACTACTGCCCTGTCT TGCCCTGATGGGTGGCAGGAAGGTGATGTCCATCAGCATCCGGCTGAAAGTGCAGAAAGTCATCCCAGGGCCCCC CGTTGATGTTAACTTTGATGTCTTCCTCCAACACAACAACACCCAAGCTCGCAATCCCTCAACAATCTGACTTTCA TAATAACCGTTACCAAAAAGTCCTGACCCTCAACCTCGATCAAGTAGATTTCCAACATGCCGGCAACTACTCCTG CGTGGCCAGCAACGTGCAGGCCAAGCACTCCACCTCCATGTTCTTCCGGGTGGTAGAGAGTGCCTACTTGAACTT CCCAGGCCTGCAAGGTTTTAACTGGACCTACCTGGGACCCTTTTCTGACCACCAGCCTGAGCCCAAGCTTGCTAA CTACTCCTTCCTGGCCAGAAACCCAGGAGGCTGGAGAGCTCTGACGTTTGAGCTCACCCTTCGATACCCCCCAGA GGTAAGCGTCATATGGACATTCATCAACGGCTCTGGCACCCTTTTGTGTGCTGCCTCTGGGTACCCCCAGCCCAA CGTGACATGGCTGCAGTGCCACACTGATAGGTGTGATGAGGCCCAAGTGCTGCAGGTCTGGGATGACCC ATACCCTGAGGTCCTGAGCCAGGAGCCCTTCCACAAGGTGACGGTGCAGAGCCTGACTGTTGAGACCTTAGA GCACAACCAAACCTACGAGTGCAGGGCCCACAACAGCGTGGGGAGTGGCTCCTGGGCCTTCATACCCATCTCTGC AGGAGCCCACACGCATCCCCCGGATGAGTTCCTCTTCACACCAGTGGTGGTCGCCTGCATGTCCATCATGGCCTT GCTGCTGCTGCTGCTGCTGCTATTGTACAAGTATAAGCAGAAGCCCAAGTACCAGGTCCGCTGGAAGATCAT CGAGAGCTATGAGGGCAACAGTTATACTTTCATCGACCCCACGCAGCTGCCTTACAACGAGAAGTGGGAGTTCCC CCGGAACAACCTGCAGTTTGGTAAGACCCTCGGAGCTGGAGCCTTTGGGAAGGTGGTGGAGGCCACGGCCTTTGG TCTGGGCAAGGAGGATGCTGTCCTGAAGGTGGCTGTGAAGATGCTGAAGTCCACGGCCCATGCTGATGAGAAGGA GGCCCTCATGTCCGAGCTGAAGATCATGAGCCACCTGGGCCAGCACGAGAACATCGTCAACCTTCTGGGAGCCTG TACCCATGGAGGCCCTGTACTGGTCATCACGGAGTACTGTTGCTATGGCGACCTGCTCAACTTTCTGCGAAGGAA TGTCTCCACTTCTTCAAATGACTCCTTCTCTGAGCAAGACCTGGACAAGGAGGATGGACGGCCCCTGGAGCTCCG GGACCTGCTTCACTTCTCCAGCCAAGTAGCCCAGGGCATGGCCTTCCTCGCTTCCAAGAATTGCATCCACCGGGA TGACTGTGTCTACACGGTTCAGAGCGACGTCTGGTCCTATGGCATCCTCCTGGGAGATCTTCTCACTTGGGCT CAGCAGCAGAAGCGGTGGCAGCAGCAGCAGCAGTGAGCTGGAGGAGAGCTCTAGTGAGCACCTGACCTG CTGCGAGCAAGGGGATATCGCCCAGCCCTTGCTGCAGCCCAACAACTATCAGTTCTGCTGAGGAGTTGACGACAG GCCTTCGGTCATTTCACTCAACAGCTCGGCCCAGCTCTGAAACTTGGGAAGGTGAGGGATTCAGGGGAGGTCAGA ACTGTTCTCATGGTGTTGGCCTCGTGTTTGCTATGCCAACTAGTAGAACCTTCTTTCCTAATCCCCTTATCTTCA TGGAAATGGACTGACTTTATGCCTATGAAGTCCCCAGGAGCTACACTGATACTGAGAAAACCAGGCTCTTTGGGG

PCT/US2003/028547

FIGURE 1712B

PCT/US2003/028547

FIGURE 1713

PCT/US2003/028547

1848/6881 FIGURE 1714

GCGGCGCGGGAAGTGAAGGAGCAGAGCGGCCAGTGGGTTGGGCCAGAAAGTGTGCTCGCAGGGGCCGAACTTTGT AATTCCCGCTTCCCTTACCTCCACGCCCTTCCTGGTAGCGGGTATTTTAAGTTTCCTAAGTCTCCCGCCACGTGG CTAGGCTCTGCGCGCCCCCCTGGGGCAAGGAGGTTGCTGCGAGTCTCGGGGGTGGATTGCGACCAGCCCCTCG GGGGAGCGCCTGGAAAAGGGACCCTACAGCCTCTTAGTTGAGCTGGAACTCAGGCCTTTAGCGATTGTCTGTACT GAGACGGTCAGCTTTGGTACTCGAACTCGTGGTACAGTCATTTCTTACTTGATTAATTCAACTGTTAATCCGGTA CTCAGGGTGCTTCCTGGTGTTCGAATGAAGTGTTTCCTGGCTCAGCCCGTAACCCTTCTGGACATCTATACACAC TGGCAACAAACCTCAGAGCTTGGTCGGAAGCGGAAGGCAGAGGAAGATGCGGCACTGCAAGCTAAGAAAACCCGT GTGTCAGACCCCATCAGCACCTCGGAGAGCTCGGAAGAGGAGGAGGAAGCAGAAGCCGAAACCGCCAAAGCCAGT TTCTATGAAATGGGGGAAGCCCAAAGGTCCCAGTCTCCTAACTCCTGGTGTTACGGATTGAATTGTGTTTCCCCA AAAGGTGTTGTGCTGAGCCTCTGGCTGACAGCTGTGTTTTCTCTGCTCAGCAAAGGCTTTAACCATAAACAGGAG AAATCGGCCCAGACAGTTGCTGGTACTTTCTGCCCAGTACTACTTCACAGAGTCAGTGTCCAGCTTCCGAACAGC ATGGAGGCAGCTCTGAGTCATCCGAATCCCAGTGGCCCCCACAGCCTGCTCAGCTTCGGCTACCTGTCCTGGGAC TGGGCCAAGCCGAGCTTCGTGGCCGACGGGCCCGGGGAGGCTGGCGAGCAGCCCTCGGCCGCCCCAGCCT CCCCACATCATCTTCATCCTCACGGACGACCAAGGCTACCACGACGTGGGCTACCATGGTTCAGATATCGAGACC CCTACGCTGGACAGGCTGGCCGACCAAGGGGGTCAAGTTGGAGAATTATTACATCCAGCCCATCTGCACGCCTTCG CGGAGCCAGCTCCTCACTGGCAGGTACCAGATCCACACAGGACTCCAGCATTCCATCATCCGCCCACAGCAGCCC AACTGCCTGCCCCTGGACCAGGTGACACTGCCACAGAAGCTGCAGGAGGCAGGTTATTCCACCCATATGGTGGGC ACGGGCAATGTGGACTATTACACCTATGACAACTGTGATGGCCCAGGCGTGTGCGGCTTCGACCTGCACGAGGGT AGCCACAGCCCTCAGCGTCCCCTCTTCCTCTATGTGGCCTTCCAGGCAGTACACACCCCCTGCAGTCCCCTCGT GAGTACCTGTACCGCTACCGCACCATGGGCAATGTGGCCCGGCGGAAGTACGCGGCCATGGTGACCTGCATGGAT GAGGCTGTGCGCAACATCACCTGGGCCCTCAAGCGCTACGGTTTCTACAACAACAGTGTCATCATCTTCTCCAGT GACAATGGTGGCCAGACTTTCTCGGGGGGCAGCAACTGGCCGCTCCGAGGACGCAAGGGCACTTATTGGGAAGGT GGCGTGCGGGGCCTAGGCTTTGTCCACAGTCCCCTGCTCAAGCGAAAGCAACGGACAAGCCGGGCACTGATGCAC ATCACTGACTGGTACCCGACCCTGGTGGGTCTGGCAGGTGGTACCACCTCAGCAGCCGATGGGCTAGATGGCTAC AACCATGCCCAGCATGGCTCCCTGGAGGGCGGCTTTGGCATCTGGAACACCGCCGTGCAGGCTGCCATCCGCGTG GGTGAGTGGAAGCTGCTGACAGGAGACCCCGGCTATGGCGATTGGATCCCACCGCAGACACTGGCCACCTTCCCG GGTAGCTGGTGGAACCTGGAACGAATGGCCAGTGTCCGCCAGGCCGTGTGGCTCTTCAACATCAGTGCTGACCCT TATGAACGGGAGGACCTGGCCGGCCAGCGGCCTGATGTGGTCCGCACCCTGCTGGCTCGCCTGGCCGAATATAAC CGCACAGCCATCCCGGTACGCTACCCAGCTGAGAACCCCCGGGCTCATCCTGACTTTAATGGGGGTGCTTGGGGG AAATGCAAGATTTGCAAGCTTCGATCCTTTTTCCGTAAACTCAACACCAGGCTAATGTCCCAACGGATCTGA

PCT/US2003/028547

FIGURE 1715

LDRLAAKGVKLENYYIQPICTPSRSQLLTGRYQIHTGLQHSIIRPQQPNCLPLDQVTLPQKLQEAGYSTHMVGKW HLGFYRKECLPTRRGFDTFLGSLTGNVDYYTYDNCDGPGVCGFDLHEGENVAWGLSGQYSTMLYAQRASHILASH SPQRPLFLYVAFQAVHTPLQSPREYLY

PCT/US2003/028547

FIGURE 1716

ATGGGGATAATCAGGCACAGGTCTTTCCGCCAATGCGTTATGATGATTAAAGAAGTTGTCATATTTGTGAACTCG CGGCAAATCTGGCCTCTCTGTGATTTCATCACTGTGCACACTCCTCTCCTGCCCTCCACGACAGGCTTGCTGAAT GACAACACCTTTGCCCAGTGCAAGAAGGGGGTGCGTGTGGTGAACTGTGCCCGTGGAGGGATCGTGGACGAAGGC CAGCCTCAGCGTCAGGAGGACGGGAGAGATAGGGAGCAGAGAGGCCCATGGCAGGGAAAGCCTGGCGTTTTACAG AAAGCCTATAGCTTATTGTCTCTTTCATCCATGGTAAAAGGAGAAAACTGTGTTGCCAAAAAACACACCTTTGTGG TTTGAGGAGTCCTTGCGGAGCCTGTACCTGCTTCTTGCCCGAGGTGTGCTGCAGAGGGGCTCCCCTAACTGC ATCCTGAGGGTGCTCCCACTATGCACCCTGTGCCAAGCCTGGACACCTGAGGGATCTGTGCCCAATGCTACTGGA GCCAAGGCTGGGGCTACCTTTAGTGATAGTGTTATTATTGTAATTATTGTAACCATTGTCACAGAATGTCCAGAC TGGTATGCAGGTATAGCTCATTACCAGGAGGAAAACACAGAAGGTCTTTGTGCAGTTGCTGTGGTTTTGAGTTTC ${\tt TCTGGGATAGCTTGTATTTTGCCAGCAAATGAAAGCTTTGGACCTCTGCAGATGTCACTTGGAGGAGCAGTCAAA}$ GACATCTTCAGGTTCATGGTCATATTCATTATGGTGTTTTGTGGCCTTTATGATTGGAACGTACAACTTCTACTCC TACTACATTGGTGCAAAACAAAATGAAGCCTTCACAACAGTTGAAGAGAGTTTTAAGACACTGTTCTGGGCTATA TTTGGACTTGCTGAAGTGAAATCAGTGGTCATCAACTATAACCACAAATTCATTGAAAATATTGGTTATGTTCGT GAAATTGAGGATGATGCTGATGTGGAGTAG

PCT/US2003/028547

1851/6881 FIGURE 1717

 $\label{thm:mair} \textbf{MGIIRHRSFRQCVMMIKEATFSDSVIIVIIVTIVTECPDWYAGIAHYQEENTEGLCAVAVVLSFSGIACILPANE} \\ \textbf{SFGPLQMSLGGAVKDIFRFMVIFIMVFVAFMIGTYNFYSYYIGAKQNEAFTTVEESFKTLFWAIFGLAEVKSVVINYNHKFIENIGYVRYGVYNVTVVIVLLNVLIAMINNSFQEIEDDADVE} .$

PCT/US2003/028547

1852/6881 FIGURE 1718

ATGCCGACTGCGACCCCCGTGCCGCCGCGGATGGGCAGCCGCGCTGGCGGCCCCACCACGCCGCTGAGCCCCACG CGCCTGTCGCGGCTCCAGGAGAAGGAGGAGCTGCGCGAGCTCAATGACCGGCTGGCGGTGTACATCGACAAGGTG CGCAGCCTGGAGACGGAGAACAGCGCGCTGCAGCTGCAGGTGACGGAGCGCGAGGAGGTGCGCGGCCGTGAGCTC GCCAAGCTGCAGATCGAGCTGGGCAAGTGCAAGGCGGAACACGACCAGCTGCTCCTCAACTATGCTAAGAAGGAA TCTGATCTTAATGGCGCCCAGATCAAGCTTCGAGAATATGAAGCAGCACTGAATTCGAAAGATGCAGCTCTTGCT ACTGCACTTGGTGACAAAAAAGTTTAGAGGGAGATTTGGAGGATCTGAAGGATCAGATTGCCCAGTTGGAAGCC TCCTTAGCTGCAGCCAAAAAACAGTTAGCAGATGAAACTTTACTTAAAGTAGATTTGGAGAATCGTTGTCAGAGC CGCTTGGTAGAGGTGGATTCTGGGCGTCAAATTGAGTATGAGTACAAGCTGGCGCAAGCCCTTCATGAGATGAGA GAGCAACATGATGCCCAAGTGAGGCTGTATAAGGAGGAGCTGGAGCAGACTTACCATGCCAAACTTGAGAATGCC AGACTGTCATCAGAGATGAATACTTCTACTGTCAACAGTGCCAGGGAAGAACTGATGGAAAGCCGCATGAGAATT GAGAGCCTTTCATCCCAGCTTTCTAATCTACAGAAAGAGTCTAGAGCATGTTTGGAAAGGATTCAAGAATTAGAG GATCAAATGCAGCAACAGCTGAATGACTATGAACAGCTTCTTGATGTAAAGTTAGCCCTGGACATGGAAATCAGT GCTTACAGGAAACTCTTAGAAGGCGAAGAAGAGAGGTTGAAGCTGTCTCCAAGCCCTTCTTCCCGTGTGACAGTA TCCCGAGCATCCTCAAGTCGTAGTGTACGTACAACTAGAGGAAAGCGGAAGAGGGTTGATGTGGAAGAATCAGAG GCGAGTAGTAGTGTTAGCATCTCTCATTCCGCCTCAGCCACTGGAAATGTTTGCATCGAAGAAATTGATGTTGAT GGGAAATTTATCCGCTTGAAGAACACTTCTGAACAGGATCAACCAATGGGAGGCTGGGAGATGATCAGAAAAATT GCAAACGCTGGTGTCACAGCCAGCCCCCCAACTGACCTCATCTGGAAGAACCAGAACTCGTGGGGCACTGGCGAA GATGTGAAGGTTATATTGAAAAATTCTCAGGGAGAGGAGGTTGCTCAAAGAAGTACAGTCTTTAAAACAACCATA CCTGAAGAAGAGGAGGAGGAAGAAGCAGCTGGAGTGGTTGTTGAGGAAGAACTTTTCCACCAGCAGGGAACC CCAAGAGCATCCAATAGAAGCTGTGCAATTATG<u>TAA</u>AATTTTCAACTGTCTTCCTCAAAATAAAGAAGTATGGTA ATCTTTACCTGTATACAGTGCAGAGCCTTCTCAGAAGCACAGAATATTTTTATATTTCCTTTATGTGAATTTTTA AGCTGCAAATCTGATGGCCTTAATTTCCTTTTTGACACTGAAAGTTTTGTAAAAGAAATCATGTCCATACACTTT GTTGCAAGATGTGAATTATTGACACTGAACTTAATAACTGTGTACTGTTCGGAAGGGGTTCCTCAAATTTTTTGA CTTGGTGTAATTTGAAGATTGCCCCATCTAGACTAGCAATCTCTTCATTATTCTCTGCTATATAAAAACGGTGC TATAATTTTTTTAAAATAGAAATTTTGTAAGAAGGCAATATTAACCTAATCACCATGTAAGCACTCTGGATGAT GTGGAGGGAGGGAAGGGTTTCTCTATTAAAATGCATTCGTTGTGTTTTTTAAGATAGTGTAACTTGCTTAAATTT CTTATGTGACATTAACAAATAAAAAAGCTCTTTT

PCT/US2003/028547

FIGURE 1719

MATATPVPPRMGSRAGGPTTPLSPTRLSRLQEKEELRELNDRLAVYIDKVRSLETENSALQLQVTEREEVRGREL TGLKALYETELADARRALDDTARERAKLQIELGKCKAEHDQLLLNYAKKESDLNGAQIKLREYEAALNSKDAALA TALGDKKSLEGDLEDLKDQIAQLEASLAAAKKQLADETLLKVDLENRCQSLTEDLEFRKSMYEEEINETRRKHET RLVEVDSGRQIEYEYKLAQALHEMREQHDAQVRLYKEELEQTYHAKLENARLSSEMNTSTVNSAREELMESRMRI ESLSSQLSNLQKESRACLERIQELEDLLAKEKDNSRRMLTDKEREMAEIRDQMQQQLNDYEQLLDVKLALDMEIS AYRKLLEGEEERLKLSPSPSSRVTVSRASSSRSVRTTRGKRKRVDVEESEASSSVSISHSASATGNVCIEEIDVD GKFIRLKNTSEQDQPMGGWEMIRKIGDTSVSYKYTSRYVLKAGQTVTIWAANAGVTASPPTDLIWKNQNSWGTGE DVKVILKNSQGEEVAQRSTVFKTTIPEEEEEEEEEAAGVVVEEELFHQQGTPRASNRSCAIM

PCT/US2003/028547

FIGURE 1720

GGTCTCTGGTCTCCCCTCTCTGAGCACTCTGAGGTCCTTATGTCGTCAGAAGATCGAGAAGCTCAGGAGGATGAA TTGCTGGCCCTGGCAAGTATTTACGATGGAGATGAATTTAGAAAAGCAGAGTCTGTCCAAGGTGGAGAAACCAGG ATCTATTTGGATTTGCCACAGAATTTCAAGATATTTGTGAGCGGCAATTCAAATGAGTGTCTCCAGAATAGTGGC CCACCTTCATTCACACTTAGTGGCAAATGGCTGTCACCAACTCAGCTATCTGCTCTATGCAAGCACTTAGACAAC CTATGGGAAGAACACCGTGGCAGCGTGGTCCTGTTTGCCTGGATGCAATTTCTTAAGGAAGAGACCCTAGCATAC TTGAATATTGTCTCTCTTTTGAGCTCAAGATTGGTTCTCAGAAAAAAGTGCAGAGAAGGACAGCTCAAGCTTCT CCCAACACAGAGCTAGATTTTGGAGGAGCTGCTGGATCTGATGTAGACCAAGAGGAAATTGTGGATGAGAGAGCA GTGCAGGATGTGGAATCACTGTCAAATCTGATCCAGGAAATCTTGGACTTTGATCAAGCTCAGCAGATAAAATGC TTTAATAGTAAATTGTTCCTGTGCAGTATCTGTTTCTGTGAGAAGCTGGGTAGTGAATGCATGTACTTCTTGGAG TGCAGGCATGTGTACTGCAAAGCCTGTCTGAAGGACTACTTTGAAATCCAGATCAGAGATGGCCAGGTTCAATGC CTCAACTGCCCAGAACCAAAGTGCCCTTCGGTGGCCACTCCTGGTCAGGTCAAAGAGTTAGTGGAAGCAGAGTTA TTTGCCCGTTATGACCGCCTTCTCCTCCAGTCCTCCTTGGACCTGATGGCAGATGTGGTGTACTGCCCCCGGCCG TGCTGCCAGCTGCCTGTGATGCAGGAACCTGGCTGCACCATGGGTATCTGCTCCAGCTGCAATTTTGCCTTCTGT ACTTTGTGCAGGTTGACCTACCATGGGGTCTCCCCATGTAAGGTGACTGCAGAGAAATTAATGGACTTACGAAAT GAATACCTGCAAGCGGATGAGGCTAATAAAAGACTTTTGGATCAAAGGTATGGTAAGAGAGTGATTCAGAAGGCA CTGGAAGAGATGGAAAGTAAGGAGTGGCTAGAGAAGAACTCAAAGAGCTGCCCATGTTGTGGAACTCCCATAGAG AAATTAGACGGATGTAACAAGATGACATGTACTGGCTGTATGCAATATTTCTGTTGGATTTGCATGGGTTCTCTC TCTAGAGCAAACCCTTACAAACATTTCAATGACCCTGGTTCACCATGTTTTAACCGGCTGTTTTATGCTGTGGAT GTTGACGACGATATTTGGGAAGATGAGGTAGAAGACTAGTTAACTACTGCTCAAGATATGGAAGTGGATTGTTTT AGAAGATATGGAAGAACGAGGTTTATATTTTCATGTGGTACTACTGAAGAAGGTGCATTGATACATTTTTAAATG TAAGTTGAGAAAAATTTATAAGCCAAAGGTTCAGAAAATTAAACTACAGAA

PCT/US2003/028547

FIGURE 1721

GCGACATGTGGCGCCTCCCGGGACTCCTGGGCCGAGCTCTTCCCCGTACACTGGGACCTAGCCTCTGGAGGGTGA CTCCTAAGTCCACCAGCCCAGATGGGCCTCAGACTACCTCCTCCACTTTGCTGGTTCCTGTGCCTAACCTCGACA CTTCCCGTGTCTCCCCGAACACCCTATGGGATGCCATATCTTGGGGCACTCTGGCCGTGCTGGCCCTGCAGCTGG CAAGGCAGATCCACTTCCAGGCATCCCTGCCAGCAGGACCTCAGCGGGTAGAACACTGCTCCTGGCACAGTCCCC TGGACCGTTTCTCTCATCTCCCTTGTGGCACCCATGCTCCTCACTGCGACAACACATCCTCCCCAGCCCCGATG GCCCAGCTCCCAGGCACACTGGCCTCAGGGAACCCAGGCTTGGCCAGGAAGAAGCCTCAGCTCAGCCCCGGAACT TCTCACACAACTCTTTGAGAGGAGCTCGTCCTCAGGACCCCTCTGAGGAAGGTCCCGGTGATTTTGGCTTCCTGC ATGCCAGTAGTAGCATCGAGTCCGAGGCAAAACCAGCCCAGCCCACTGGTGAAAAAGGAACAAGATAAAT CAAAAACTCTTTCCCTTGAGGAGGCTGTGACTTCCATTCAGCAGCTCTTCCAGCTCAGTGTTTCCATCGCTTTCA ACTTCCTGGGAACAGAGAACATGAAGAGTGGCGACCACACGGCAGCCTTTTCTTACTTCCAGAAAGCTGCAGCCC GCGGCTACAGCAAAGCGCAGTACAATGCGGGCTTGTGTCATGAGCATGGCAGAGGCACCCCCAGGGACATTAGCA AGGCGGTCCTTTATTATCAGTTGGCTGCCAGCCAGGCCAGGCCTGGCTCAGTACCGCTATGCCAGGTGCCTAC TACGAGACCCAGCCTCTTCGTGGAACCCTGAGCGGCAGAGGGCAGTGTCCTTGCTGAAGCAGGCTGCAGACTCAG GCTTGAGAGAGGCCCAAGCTTTCCTCGGGGTGCTTTTCACCAAGGAGCCCTACCTGGATGAGCAGAGAGCTGTGA AATATCTTTGGCTTGCAGCCAACAATGGGGACTCACAGAGCAGGTACCACCTTGGAATTTGCTATGAGAAAGGCC TTGGTGTGCAGAGGAATCTGGGAGAGGCCTTGAGATGTTACCAGCAGTCAGCCGCTCTGGGAAATGAGGCCGCCC AGGAGAGGCTGCGAGCCCTCTTTTCCATGGGGGCTGCAGCCCCGGGGCCCAGCGACCTGACAGTTACAGGACTGA AGTCTTTCTCCAGCCCTCCCTCTGCAGCTTGAACACCCTGCTAGCAGGAACCTCACGCCTACCACGCCTCGA GCACAGGCAACCTTEGCCTCCTCTGCAGAAGTGGGCATCTCGGAGCCAGCCTGGAAGCCTCCAGCAGGGCTATTC ${\tt CCCCACACCCCTACCCACTGGAAAGGAGTGTTGTAAGACTAGGTTTTGGC} {\tt TAAGGTGAGATAAAACATAGTCCCT}$ GGTGCCTCTTAGGGGCCAGAGCGGCAGGAGGTTGGATAACAAAAATAGAGCATCAGCAACCCTTTCCAGGTAGA AATTCCAGCGGGAGTTCAGGTTCCCAAGCAATTTCACGTACATGGCTGGTAAGTGACTGATCTTTCCCCCCGCTT GGTAGCCTCACAGATGAGTCTTGGATGCATTCACAGTCATTTCTGGTCTGTGCACCAAAGGATGCATTCAGTGAC CTATGAAAAACCCTACTGAAGGGTCCAGAGACCCTGGTGCTCACCTTAGCCTTTGTCTTTGAGCAAATAACTTAC CTTCTTCCTTCTTATGCCTGGGTTTTCTCACACTTAAATCTGTACTACTGTTTGCCAATGTCTGATGTGTATC CCTGGTTCACAAGAAGATTTTAGATGGTATTCAAATTAATATTTTCTATTTAGTTATATATTTAATGTATAATAT AGTGAATCAGTTTAAAGAAAAACATAACGTAAAAGTGGGCACAGATCCAGAGAGGTAGCAAAAATCACAGGGGTG GTTCCATGAATGGCTGACACTTAGGAAACTCTGAATTAGGCCATCCTCGAGACTAGCCCACCATTCACCTCTGTT GATGTGTCTGCTTGACTTCAGAACTTCTCACCTCAGCCCTAAAGAGGGAGCCTGTGGGTTCTCAGAGAGATATC ACAATTTGAGTCCCAAAGAAGAGGCCAGATACCCACCTCCCCCAAATCTTAAGCACCTGCGCCAGTACAG TCAAGAAGAGGAAAGTGTGTGAAGACCCAGGTCTGGCTCTGCCACTTGCCTGGCCATGTCACCTTGAAGCTGTGA CCTGACTCCCTATATTGTTTCCTCAGTTGTAGACCAAAGGCAATGGTGTCTGCCCTCCTACCTTAGAAGACAAAT GCAAGGGCATTTCACCACAGAGAGGACCTTTGTGCTCACTTTGGCCCAGGAGGCAGTGATGCTCATGGTTGCATG ACTITATGAGTCGCTGGGCCAGGGTGAGGACCTGGGCCTCCTGACTCCTGGCCCAGAGTTCTTGTCCATCAGTTC ATACTGCAATTTTATGTGAAAGCATTATGACTGTCCTACCCATGGGAGAGTAAATGTAGATTGAATGCTAGGAGT CTTAAAGCTGGAGAGTATAGATTTTGAGGTCCCCATTTGGGAAACATGTGCCAGAAATGTCTAGGTGTTTAATAA **AACAGATATTGGATTATCTC**

PCT/US2003/028547

1856/6881 FIGURE 1722

MWRLPGLLGRALPRTLGPSLWRVTPKSTSPDGPQTTSSTLLVPVPNLDRSGPHGPGTSGGPRSHGWKDAFQWMSS RVSPNTLWDAISWGTLAVLALQLARQIHFQASLPAGPQRVEHCSWHSPLDRFFSSPLWHPCSSLRQHILPSPDGP APRHTGLREPRLGQEEASAQPRNFSHNSLRGARPQDPSEEGPGDFGFLHASSSIESEAKPAQPQPTGEKEQDKSK TLSLEEAVTSIQQLFQLSVSIAFNFLGTENMKSGDHTAAFSYFQKAAARGYSKAQYNAGLCHEHGRGTPRDISKA VLYYQLAASQGHSLAQYRYARCLLRDPASSWNPERQRAVSLLKQAADSGLREAQAFLGVLFTKEPYLDEQRAVKY LWLAANNGDSQSRYHLGICYEKGLGVQRNLGEALRCYQQSAALGNEAAQERLRALFSMGAAAPGPSDLTVTGLKS FSSPSLCSLNTLLAGTSRLPHASSTGNLGLLCRSGHLGASLEASSRAIPPHPYPLERSVVRLGFG

WO 2004/030615 PCT/US2003/028547

FIGURE 1723A

GCCCTCCTGATTCTGGGGCCTCCCAGGATGGAGCACCTGAGGCACAGCCCAGGCCCTGGGGGGCAACGGCTACTG CTGCCCTCCATGCTGCTAGCACTGCTGCTCCTGCTGGCTCCATCCCCAGGCCACGCCACTCGGGTAGTGTACAAG GTGCCGGAGGAACAGCCACCCCAACACCCTCATTGGGAGCCTCGCAGCCGACTATGGTTTTCCAGATGTGGGGCAC CTGTACAAGCTAGAGGTGGCCCCGTACCTTCGCGTGGATGGCAAGACAGGTGACATTTTCACCACCGAGACC TCCATCGACCGTGAGGGGCTCCGTGAATGCCAGAACCAGCTCCCTGGTGATCCCTGCATCCTGGAGTTTGAGGTA TCTATCACAGACCTCGTGCAGAATGGCAGCCCCCGGCTGCTAGAGGGCCAGATAGAAGTACAAGACATCAATGAC AACACCCCAACTTCGCCTCACCAGTCATCACTCTGGCCATCCCTGAGAACACCCAACATCGGCTCACTCTTCCCC ATCCCGCTGGCTTCAGACCGTGATGCTGGTCCCAACGGTGTGGCATCCTATGAGCTGCAGGTGGCAGAGGACCAG GAGGAGAAGCAACCACAGCTCATTGTGATGGGCAACCTGGACCGTGAGCGCTGGGACTCCTATGACCTCACCATC AAGGTGCAGGATGGCGGCAGCCCCCACGCGCCAGCAGTGCCCTGCTGCTGACCCGTGCTTGACACCAATGAC AACGCCCCCAAGTTTGAGCGGCCCTCCTATGAGGCCGAACTATCTGAGAATAGCCCCATAGGCCACTCGGTCATC CAGGTGAAGGCCAATGACTCAGACCAAGGTGCCAATGCAGAAATCGAATACACATTCCACCAGGCGCCCGAAGTT GTGAGGCGTCTTCTTCGACTGGACAGGAACACTGGACTTATCACTGTTCAGGGCCCGGTGGACCGTGAGGACCTA AGCACCCTGCGCTTCTCAGTGCTTGCTAAGGACCGAGGCACCCAACCCCAAGAGTGCCCGTGCCCAGGTGGTTGTG ACCGTGAAGGACATGAATGACAATGCCCCCACCATTGAGATCCGGGGCATAGGGCTAGTGACTCATCAAGATGGG ATGGCTAACATCTCAGAGGATGTGGCAGAGGAGACAGCTGTGGCCCTGGTGCAGGTGTCTGACCGAGATGAGGGA GAGAATGCAGCTGTCACCTGTGTGGTGGCAGGTGATGTGCCCTTCCAGCTGCGCCAGGCCAGTGAGACAGGCAGT GACAGCAAGAAGAAGTATTTCCTGCAGACTACCACCCCGCTAGACTACGAGAAGGTCAAAGACTACACCATTGAG ATTGTGGCTGTGGACTCTGGCAACCCCCCACTCTCCAGCACTAACTCCCTCAAGGTGCAGGTGGACGTCAAT GACAACGCACCTGTCTTCACTCAGAGTGTCACTGAGGTCGCCTTCCCGGAAAACAACAAGCCTGGTGAAGTGATT GCTGAGATCACTGCCAGTGATGCTGACTCTGGCTCTAATGCTGAGCTGGTTTACTCTCTGGAGCCTGAGCCGGCT GCTAAGGGCCTCTTCACCATCTCACCCGAGACTGGAGAGTCCAGGTGAAGACATCTCTGGATCGGGAACAGCGG GAGAGCTATGAGTTGAAGGTGGTGGCAGCTGACCGGGGCAGTCCTAGCCTCCAGGGCACAGCCACTGTCCTTGTC AATGTGCTGGACTGCAATGACAATGACCCCAAATTTATGCTGAGTGGCTACAACTTCTCAGTGATGGAGAACATG CCAGCACTGAGTCCAGTGGGCATGGTGACTGTCATTGATGGAGACAAGGGGGAGAATGCCCAGGTGCAGCTCTCA GTGGAGCAGGACAACGGTGACTTTGTTATCCAGAATGGCACAGGCACCATCCTATCCAGCCTGAGCTTTGATCGA GAGCAACAAAGCACCTACACCTTCCAGCTGAAGGCAGTGGATGGTGGCGTCCCACCTCGCTCAGCTTACGTTGGT GTCACCATCAATGTGCTGGACGAGAATGACAACGCACCCTATATCACTGCCCCTTCTAACACCTCTCACAAGCTG CTGACCCCCAGACACGTCTTGGTGAGACGGTCAGCCAGGTGGCAGCCGAGGACTTTGACTCTGGTGTCAATGCT GAGCTGATCTACAGCATTGCAGGTGGCAACCCTTATGGACTCTTCCAGATTGGGTCACATTCAGGTGCCATCACC CTGGAGAAGGAGTTGAGCGGCGCCACCATGGGCTACACCGCCTGGTGGTGAAGGTCAGTGACCGCGGCAAGCCC CCACGCTATGGCACAGCCTTGGTCCATCTTATGTCAATGAGACTCTGGCCAACCGCACGCTGCTGGAGACCCTC CTGGGCCACAGCCTGGACACGCCGCTGGATATTGACATTGCTGGGGATCCAGAATATGAGCGCTCCAAGCAGCGT GGCAACATTCTCTTTGGTGTGGTGGCTGGTGGCCGTGGCCTTGCTCATCGCCCTGGCGGTTCTTGTGCGC TACTGCAGACAGCGGGAGGCCAAAAGTGGTTACCAGGCTGGTAAGAAGGAGACCAAGGACCTGTATGCCCCCAAG CCCAGTGGCAAGGCCTCCAAGGGAAACAAAAGCAAAGGCAAGAAGAGCAAGTCCCCAAAGCCCGTGAAGCCAGTG GAGGACGAGGATGAGGCCGGGCTGCAGAAGTCCCTCAAGTTCAACCTGATGAGCGATGCCCCTGGGGACAGTCCC CGCATCCACCTGCCCCTCAACTACCCACCAGGCAGCCCTGACCTGGGCCGCCACTATCGCTCTAACTCCCCACTG CCTTCCATCCAGCTGCAGCCCCAGTCACCCTCAGCCTCCAAGAAGCACCAGGTGGTACAGGACCTGCCACCTGCA AACACATTCGTGGGCACCGGGGACACCACGTCCACGGGCTCTGAGCAGTACTCCGACTACAGCTACCGCACCAAC CAGGACCCATCCCAGCACAGTTACTATGACAGTGGCCTGGAGGAGTCTGAGACGCCGTCCAGCAAGTCATCCTCA GGGCCTCGACTCGGTCCCTGGCCCTGCCTGAGGATCACTATGAGCGCACCACCCCTGATGGCAGCATAGGAGAG ATGGAGCACCCCGAGAATGACCTTCGCCCTTTGCCTGATGTCGCCATGACAGGCACATGTACCCGGGAGTGCAGT GAGTTTGGCCACTCTGACACATGCTGGATGCCTGGCCAGTCATCTCCCAGCCGCCGGACCAAGAGCAGCGCCCTC GAAGACCGGAACACCAAAACGGCCCCCGTGCGCCTCCTGCCCTCCTACAGTGCCTTCTCCCACAGTAGCCATGAT TCCTGCAAGGACTCGGCCACCTTGGAGGAAATCCCCCTGACCCAGACCTCGGACTTCCCACCCGCAGCCACACCG

PCT/US2003/028547

FIGURE 1723B

PCT/US2003/028547

FIGURE 1724

GGAGACGCTTCTTCCTCTTGCTGCTCTTCTCGTTCCCGAGATCAGCGGCGGCGGTGACCGCGAGTGGGTCGGCAC CGTCTCCGGCTCCGGGTGCGAACAATGCTGACTGATAGCGGAGGCGGCGCCACCTCCTTTGAGGAGGACCTGGAC ACCGTGAGGCTCTTTGGGGAGGCCGGGCCAGCGTCGGGAGTCGGCAGCAGCGGCGGCGGCGGCAGCGGCAGCGGT ACGGGCGGAGGGGACGCGGCGCTGGATTTCAAGTTGGCGGCTGCCGTGCTGAGGACCGGGGGTGGAGGTGCCC CTTAAAACAACATCAGAGATATTCTTATCAAGTACTGCAGAAGGAGCAGACTTACGCACTGTGGATCCAGAGACA CAGGCACGACTAGAAGCATTGCTAGAAGCAGCAGGAATTGGCAAATTGTCAACTGCTGATGGTAAAGCTTTTGCA **ATGAAAGCAGAAAACAGCCACAATGCAGGACAAGTGGACACTCGCAGTCTAGCAGAAGCTTGTTCAGATGGGGAT** GTTAATGCTGTTCGTAAATTGCTAGATGAAGGCAGAAGTGTAAATGAACATACAGAAGAAGGAGAAAGCCTGCTG GGGAATAAAGGAGACATAACTCCCCTGATGGCAGCTTCCAGTGGAGGTTACTTAGATATTGTGAAATTATTACTT CTTCATGATGCTGATGTCAACTCCCAGTCTGCAACAGGAAACACTGCGCTAACTTATGCATGTGCTGGAGGATTT GTTGACATTGTTAAAGTGCTCCTTAATGAAGGTGCAAATATAGAAGATCATAATGAAAATGGACATACTCCCTTA ATGGAAGCAGCCAGTGCAGGTCATGTGGAAGTTGCAAGAGTTCTTTTAGATCATGGTGCAGGCATCAACACTCAT GTAGAGGTGGCACGTTTGCTTTTGGATAGTGGTGCTCAAGTGAACATGCCTGCAGATTCATTTGAATCTCCATTG ACGCTAGCTGCCTGTGGAGGACATGTTGAATTGGCAGCTCTACTTATTGAAAGGGGAGCAAATCTTGAAGAAGTT AATGATGAAGGATACACTCCCTTGATGGAAGCTGCCCGGGAAGGACATGAAGAAATGGTGGCACTACTCTTAGCA CAAGGAGCAAATATAAATGCCCAGACAGAAGAAACTCAAGAAACTGCTCTTACTTTGGCTTGCTGTGGAGGATTT TCTGAAGTTGCAGACTTTCTTATTAAGGCAGGGGCTGATATAGAACTTGGCTGCTCCACACCTCTGATGGAGGCA TCTCAGGAGGGACACCTGGAATTGGTTAAATATTTGCTGGCTTCTGGCGCTAATGTGCATGCTACAACAGCAACA GGAGACACAGCCTTAACCTATGCTTGTGAAAATGGACATACGGATGTTGCAGATGTTTTACTTCAAGCAGGGGCT GATTTAGACAAGCAGGAGGACATGAAGACTATTTTGGAGGGCATAGATCCGGCCAAGCATCAGGTGAGGGTGGCC TTTGATGCTTGTAAGCTACTACGTAAAGAA<u>TAG</u>ATGTTGTAGGTAACCAGAACTCTGGATATCTGAATTCCAGCC AAGAAGTTCCAGGACCCTGCTGGGTGACAAAGGAAATCCTCTTCAATTGAAAAAGATTATGAAGTCCCAATAAAA

PCT/US2003/028547

1860/6881 FIGURE 1725

MKAENSHNAGQVDTRSLAEACSDGDVNAVRKLLDEGRSVNEHTEEGESLLCLACSAGYYELAQVLLAMHANVEDR GNKGDITPLMAASSGGYLDIVKLLLHDADVNSQSATGNTALTYACAGGFVDIVKVLLNEGANIEDHNENGHTPL MEAASAGHVEVARVLLDHGAGINTHSNEFKESALTLACYKGHLDMVRFLLEAGADQEHKTDEMHTALMEACMDGH VEVARLLLDSGAQVNMPADSFESPLTLAACGGHVELAALLIERGANLEEVNDEGYTPLMEAAREGHEEMVALLLA QGANINAQTEETQETALTLACCGGFSEVADFLIKAGADIELGCSTPLMEASQEGHLELVKYLLASGANVHATTAT GDTALTYACENGHTDVADVLLQAGADLDKQEDMKTILEGIDPAKHQVRVAFDACKLLRKE

PCT/US2003/028547

FIGURE 1726

GGCACGAGGGCGGGAAGATGGCGGATGACAAGGATTCTCTGCCTAAGCTTAAGGACCTGGCATTTCTCAAGAAC CAGCTGGAAAGCCTGCAGCGCGTGTAGAAGACGAAGTCAACAGTGGAGTGGGCCAGGATGGCTCGCTGTTGTCC TCCCCGTTCCTCAAGGGATTCCTGGCTGGCTATGTGGTGGCCAAACTGAGGGCATCAGCAGTATTGGGCTTTGCT GTGGGCACCTGCACTGGCATCTATGCGGCTCAGGCATATGCTGTGCCCAACGTGGAGAAGACATTAAGGGACTAT TTGCAGTTGCTACGCAAGGGGCCCGACTAGCTCTAGGTGCCATGGAAGAGGCAGGATGAGCAGCCTCAGCCTTCAG GTGGAGACACTTTATCTGGATTCCCCAGCTGTCATCCATTTGCTATCTCCAACTTTCCTGCCACCTTCATCCTTG CCTCCCTTCCTGCAGATTGTGGACAGTAGTTCCTCAGCCTGCACCCTGGATTCCTTCTTCCCCTTCCTAGCTCCA TGGGACTCGCCCCAAGACTGTGGCTTCAAGGACCACCAGCCCCTTACTCTTCAAGCCCTGACTGTGGAGTTGGTA ${\tt GATTTTCCCCAAACGTGTTGCAATCCCTGCTGCCCCTTAGCCACCCAGGGTCTTGTGTGGGGT} \underline{{\tt ATC}} {\tt AGTGTAGAGG}$ ATGGGGGTATGCCAGGCCTGGGCCGTCCCAGGCAGGCCCGCTGGACCCTGATGCTACCCTATCCACTGCCATGT ACGGTGCCCATGCCCCATTGCTGGCACTGTGCCATGTGGACGGCCGAGTGCCCTTCCGGCCCTCCAGCCGTGC TGCTGACTGAGCTGACCAAGCTACTGTTATGCGCCTTCTCCCTTCTGGTAGGCTGGCAAGCATGGCCCCAGGGGC ATCTTCAGCGTTACATGGACCCCAGCACCTACCAGGTGCTGAGTAATCTCAAGATTGGAAGCACAGCTGTGCTCT ACTGCCTCTGCCTCCGGCACCGCCTCTCTGTGCGTCAGGGGTTAGCGCTGCTGCTGCTGATGGCTGCGGGAGCCT GCTATGCAGCAGGGGGCCTTCAAGTTCCCGGGAACACCCTTCCCAGTCCCCCTCCAGCAGCTGCCAGCCCCA TGCCCCTGCATATCACTCCGCTAGGCCTGCTCCTCATTCTGTACTGCCTCATCTCAGGCTTGTCGTCAGTGT ACACAGAGCTGCTCATGAAGCGACAGCGGCTGCCCCTGGCACTTCAGAACCTCTTCCTCTACACTTTTGGTGTGC TTCTGAATCTAGGTCTGCATGCTGGCCGGCGCTCTGGCCCAGGCCTCCTGGAAGGTTTCTCAGGATGGGCAGCAC TCGTGGTGCTGAGCCAGGCACTAAATGGACTGCTCATGTCTGCTGTCATGAAGCATGGCAGCAGCATCACACGCC TCTTTGTGGTGTCCTGCTGGTGGTCAACGCCGTGCTCTCAGCAGTCCTGCTACGGCTGCAGCTCACAGCCG $\texttt{CCTTCTTCCTGGCCACATTGCTCATTGGCCTGGCCATGCGCCTGTACTATGGCAGCCGC} \underline{\textbf{TAG}} \\ \texttt{CCCTGACAACTT} \\$ AGCAGCCCTGTAACAAGTGCCTTGTGAGAAAAGCTGGAGAAGTGAGGGCAGCCAGGTTATTCTCTGGAGGTTGGT GGATGAAGGGGTACCCCTAGGAGATGTGAAGTGTGGGTTTGGTTAAGGAAATGCTTACCATCCCCACCCCAAC CAAGTTCTTCCAGACTAAAGAATTAAGGTAACATCAATACCTAGGCCTGAGAAATAACCCCATCCTTGTTGGGCA GCTCCCTGCTTTGTCCTGCATGAACAGAGTTGATGAAAGTGGGGTGTGGGCAACAAGTGGCTTTCCTTGCCTACT TTAGTCACCCAGCAGAGCCACTGGAGCTGGCTAGTCCAGCCCAGCCATGGTGCATGACTCTTCCATAAGGGATCC TCACCCTTCCACTTTCATGCAAGAAGGCCCAGTTGCCACAGATTATACAACCATTACCCAAACCACTCTGACAGT CTCCTCCAGTTCCAGCAATGCCTAGAGACATGCTCCCTGCCCTCTCCACAGTGCTGCTCCCCACACCTAGCCTTT GTTCTGGAAACCCCAGAGAGGGCTGGGCTTGACTCATCTCAGGGAATGTAGCCCCTGGGCCCTGGCTTAAGCCGA CACTCCTGACCTCTGTTCACCCTGAGGGCTGTCTTGAAGCCCGCTACCCACTCTGAGGCTCCTAGGAGGTACC ATGCTTCCCACTCTGGGGCCTGCCCTGCCTAGCAGTCTCCCAGCTCCCAACAGCCTGGGGAAGCTCTGCACAGA GTGACCTGAGACCAGGTACAGGAAACCTGTAGCTCAATCAGTGTCTCTTTAACTGCATAAGCAATAAGATCTTAA

PCT/US2003/028547

FIGURE 1727

MSVEDGGMPGLGRPRQARWTLMLLLSTAMYGAHAPLLALCHVDGRVPFRPSSAVLLTELTKLLLCAFSLLVGWQA WPQGPPPWRQAAPFALSALLYGANNNLVIYLQRYMDPSTYQVLSNLKIGSTAVLYCLCLRHRLSVRQGLALLLLM AAGACYAAGGLQVPGNTLPSPPPAAAASPMPLHITPLGLLLLILYCLISGLSSVYTELLMKRQRLPLALQNLFLY TFGVLLNLGLHAGGGSGPGLLEGFSGWAALVVLSQALNGLLMSAVMKHGSSITRLFVVSCSLVVNAVLSAVLLRL QLTAAFFLATLLIGLAMRLYYGSR

PCT/US2003/028547

FIGURE 1728A

CAGAAAGCCATGTCGGACTCGGCGCCCAGCGCCCAAGCGCTAACCCGCTGAAAGTTTCTCAGCGAAATCTCAGGG CACCGGGAGGGTAGTGGGAGTTTTGCTTCTGCTTGGTGCCTTGAACAAGGCTTCCACGGTCATTCACTATGAGAT CCCGGAGGAAAGAGAGAGAGGGTTTCGCTGTGGGCAACGTGGTCGCGAACCTTGGTTTGGATCTCGGTAGCCTCTC AGCCCGCAGGTTCCGGGTGTCTCGGAGCTAGCCGAAGATTCTTTGAGGTGAACCGGGAGACCGGAGAGATGTT TGTGAACGACCGTCTGGATCGAGAGGAGCTGTGTGGGACACTGCCCTCTTGCACTGTAACTCTGGAGTTGGTAGT GGAGAACCCGCTGGAGCTGTTCAGCGTGGAAGTGGTGATCCAGGACATCAACGACAACAATCCTGCTTTCCCTAC CCAGGAAATGAAATTGGAGATTAGCGAGGCCGTGGCTCCGGGGACGCGCTTTCCGCTCGAGAGCGCGCACGATCC CGATGTGGGAAGCAACTCTTTACAAACCTATGAGCTGAGCCGAAATGAATACTTTGCGCTTCGCGTGCAGACGCG GGAGGACAGCACCAAGTACGCGGAGCTGGTGTTGGAGCGCGCCCTGGACCGAGAACGGGAGCCTAGTCTCCAGTT CGTGGTACAAGTCCTTGCAACGGATCTGGATGAAGGCCCCAACGGTGAAATTATTTACTCCTTCGGCAGCCACAA CCGCGCCGGCGTGCGCCAACTATTCGCCTTAGACCTTGTAACCGGGATGCTGACAATCAAGGGTCGGCTGGACTT CGAGGACACCAAACTCCATGAGATTTACATCCAGGCCAAAGACAAGGGCGCCAATCCCGAAGGAGCACATTGCAA AGTGTTGGTGGAGGTTGTGGATGTGAATGACAACGCCCCGGAGATCACAGTCACCTCCGTGTACAGCCCAGTACC GACCTGCGAAGTTCCACCGGGTCTCCCTTTCAGCCTTACTTCTTCCCTCAAGAATTACTTCACTTTGAAAACCAG TGCAGACCTGGATCGGGAGACTGTGCCAGAATACAACCTCAGCATCACCGCCCGAGACGCCGGAACCCCTTCCCT CTCAGCCCTTACAATAGTGCGTGTTCAAGTGTCCGACATCAATGACAACCCTCCACAATCTTCTCAATCTTCCTA CGACGTTTACATTGAAGAAAACAACCTCCCGGGGCTCCAATACTAAACCTAAGTGTCTGGGACCCCGACGCCCC GCAGAATGCTCGGCTTTCTTTCTTTCTCTTGGAGCAAGGAGCTGAAACCGGGCTAGTGGGTCGCTATTTCACAAT AAATCGTGACAATGGCATAGTGTCATCCTTAGTGCCCCTAGACTATGAGGATCGGCGGGAATTTGAATTAACAGC TCATATCAGCGATGGGGGCACCCGGTCCTAGCCACCAACATCAGCGTGAACATATTTGTCACTGATCGCAATGA CAATGCCCCCAGGTCCTATATCCTCGGCCAGGTGGGAGCTCGGTGGAGATGCTGCCTCGAGGTACCTCAGCTGG CCACCTAGTGTCACGGGTGGTAGGCTGGGACGCGGATGCAGGGCACAATGCCTGGCTCTCCTACAGTCTCTTGGG ATCCCCTAACCAGAGCCTTTTTGCCATAGGGCTGCACACTGGTCAAATCAGTACTGCCCGTCCAGTCCAAGACAC AGATTCACCCAGGCAGACTCTCACGGTCTTGATCAAAGACAATGGGGAGCCTTCGCTCTCCACCACTGCTACCCT CACTGTGTCAGTAACCGAGGACTCTCCTGAAGCCCGAGCCGAGTTCCCCTCTGGCTCTGCCCCCGGGAGCAGAA AAAAAATCTCACCTTTTATCTACTTCTTTCTCTAATCCTGGTTTCTGTGGGGTTTGTGGTCACAGTGTTCGGAGT ACCAGGGCCCTCCTTGCACGCGGACGCCGTGCGGGGAGGCCTGATGTCGCCGCACCTTTACCATCAGGTGTATCT ${\tt CACCACGGACTCCCGCCGCAGCGACCCGCTGCTGAAGAAACCTGGTGCAGCCAGTCCACTGGCCAGCCGCCAGAA}$ CACGCTGCGGAGCTGTTCTATAGGCAGGTGTTGGGTGCAGAGAGCGCCCCTCCCGGACAGCAAGC CCCGCCCAACACGGACTGGCGTTTCTCTCAGGCCCAGAGACCCGGCACCAGCGGCTCCCAAAATGGCGATGACAC ${\tt CGGCACCTGGCCCAACAACCAGTTTGACACAGAGATGCTGCAAGCCATGATCTTGGCGTCCGCCAGTGAAGCTGCCAGGCCAGTGAAGCTGCCAGGCCAGTGAAGCTGCCAGGCCAGTGAAGCTGCCAGGCCAGTGAAGCCAGGCCAGTGAAGCCAGGCAGGC$ TGATGGGAGCTCCACCCTGGGAGGGGGTGCCGGCACCATGGGATTGAGCGCCCGCTACGGACCCCAGTTCACCCT GCAGCACGTGCCCGACTACCGCCAGAATGTCTACATCCCAGGCAGCAATGCCACACTGACCAACGCAGCTGGCAA AGGCCAGGCCAAGAGCCACAGGGCGGCCTCTCCCCAACCAGCCCAGCTTCTCCTTACCTGCACCCAGGCCTCAGA GTTTCAGGGCTAACCCCCAGAATACTGGTAGGGGCCAAGGCCATGCTCCCCTTGGGAAACAGAAACAAGTGCCCA GTCAGCACCTACCCCTTCCCCCCAGGGGGTTGAATATGCAAAAGCAGTTCCGCTGGGAACCCCCATCCAATCAA CTGCTGTACCCATGGGGGTAGTGGGGTTACTGTAGACACCAAGAACCATTTGCCACACCCCGTTTAGTTACAGCT CCTCTTTCCCGAGTAAGGTGGTTGGGGTGTTGAAGTACCAAGTAACCTACAAGCCTCCTAGTTCTGAAAAGTTGG AAGGGCATCATGACCTCTTGGCCTCTCCTTTGATTCTCAATCTTCCCCCAAAGCATGGTTTGGTGCCAGCCCCTT CACCTCCTTCCAGAGCCCAAGATCAATGCTCAAGTTTTGGAGGACATGATCACCATCCCCATGGTACTGATGCTT GCTGGATTTAGGGAGGCCATTTTGCTACCAAGCCTCTTCCCAACGCCCTGGGGACCAGTCTTCTGTTTTGTTTTT

PCT/US2003/028547

FIGURE 1728B

PCT/US2003/028547

FIGURE 1729

MVPEAWRSGLVSTGRVVGVLLLLGALNKASTVIHYEIPEEREKGFAVGNVVANLGLDLGSLSARRFRVVSGASRR
FFEVNRETGEMFVNDRLDREELCGTLPSCTVTLELVVENPLELFSVEVVIQDINDNNPAFPTQEMKLEISEAVAP
GTRFPLESAHDPDVGSNSLQTYELSRNEYFALRVQTREDSTKYAELVLERALDREREPSLQLVLTALDGGTPALS
ASLPIHIKVLDANDNAPVFNQSLYRARVLEDAPSGTRVVQVLATDLDEGPNGEIIYSFGSHNRAGVRQLFALDLV
TGMLTIKGRLDFEDTKLHEIYIQAKDKGANPEGAHCKVLVEVVDVNDNAPEITVTSVYSPVPEDAPLGTVIALLS
VTDLDAGENGLVTCEVPPGLPFSLTSSLKNYFTLKTSADLDRETVPEYNLSITARDAGTPSLSALTIVRVQVSDI
NDNPPQSSQSSYDVYIEENNLPGAPILNLSVWDPDAPQNARLSFFLLEQGAETGLVGRYFTINRDNGIVSSLVPL
DYEDRREFELTAHISDGGTPVLATNISVNIFVTDRNDNAPQVLYPRPGGSSVEMLPRGTSAGHLVSRVVGWDADA
GHNAWLSYSLLGSPNQSLFAIGLHTGQISTARPVQDTDSPRQTLTVLIKDNGEPSLSTTATLTVSVTEDSPEARA
EFPSGSAPREQKKNLTFYLLLSLILVSVGFVVTVFGVIIFKVYKWKQSRDLYRAPVSSLYRTPGPSLHADAVRGG
LMSPHLYHQVYLTTDSRRSDPLLKKPGAASPLASRQNTLRSCDPVFYRQVLGAESAPPGQQAPPNTDWRFSQAQR
PGTSGSQNGDDTGTWPNNQFDTEMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHVPDYRQNVYIP
GSNATLTNAAGKRDGKAPAGGNGNKKKSGKKEKK

PCT/US2003/028547

1866/6881 FIGURE 1730A

ACGCGCCTGAAGCACAAAGCAGATAGCTAGGAATGAACCATCCCTGGGAGTATGTGGAAACAACGGAGGAGCTCT GACTTCCCAACTGTCCCATTCTATGGGCGAAGGAACTGCTCCTGACTTCAGTGGTTAAGGGCAGAATTGAAAATA ATTCTGGAGGAAGATAAGA**ATG**ATTCCTGCGCGACTGCACCGGGACTACAAAGGGCTTGTCCTGCTGGGAATCCT CCTGGGGACTCTGTGGGAGACCGGATGCACCCAGATACGCTATTCAGTTCCGGAAGAGCTGGAGAAAGGCTCTAG GGTGGGCGACATCTCCAGGGACCTGGGGCTGGAGCCCCGGGAGCTCGCGGAGCGCGGAGTCCGCATCATCCCCAG AGGTAGGACGCAGCTTTTCGCCCTGAATCCGCGCAGCGGCAGCTTGGTCACGGCGGCAGGATAGACCGGGAGGA GCTCTGTATGGGGGCCATCAAGTGTCAATTAAATCTAGACATTCTGATGGAGGATAAAGTGAAAATATATGGAGT AGAAGTAGAAGTAAGGGACATTAACGACAATGCGCCTTACTTTCGTGAAAGTGAATTAGAAATAAAAATTAGTGA AAATGCAGCCACTGAGATGCGGTTCCCTCTACCCCACGCCTGGGATCCGGATATCGGGAAGAACTCTCTGCAGAG GGTGCTGAAACGCGCCCTGGACCGCGAAGAAAAGGCTGCTCACCACCTGGTCCTTACGGCCTCCGACGGGGGCGA CCCGGTGCGCACAGGCACCGCGCGCATCCGCGTGATGGTTCTGGATGCGAACGACAACGCACCAGCGTTTGCTCA GCCCGAGTACCGCGCGAGCGTTCCGGAGAATCTGGCCTTGGGCACGCAGCTGCTTGTAGTCAACGCTACCGACCC TGACGAAGGAGTCAATGCGGAAGTGAGGTATTCCTTCCGGTATGTGGACGACAAGGCGGCCCAAGTTTTCAAACT AGATTGTAATTCAGGGACAATATCAACAATAGGGGAGTTGGACCACGAGGAGTCAGGATTCTACCAGATGGAAGT GCAAGCAATGGATAATGCAGGATATTCTGCGCGAGCCAAAGTCCTGATCACTGTTCTGGACGTGAACGACAATGC CCCAGAAGTGGTCCTCACCTCTCTCGCCAGCTCGGTTCCCGAAAACTCTCCCAGAGGGACATTAATTGCCCTTTT AAATGTAAATGACCAAGATTCTGAGGAAAACGGACAGGTGATCTGTTTCATCCAAGGAAATCTGCCCTTTAAATT AGAAAAATCTTACGGAAATTACTATAGTTTAGTCACAGACATAGTCTTGGATAGGGAACAGGTTCCTAGCTACAA CATCACAGTGACCGCCACTGACCGGGGAACCCCGCCCCTATCCACGGAAACTCATATCTCGCTGAACGTGGCAGA TTCCCTCGTCTCTGTGACCGCCCACGACCCCGACTGTGAAGAGAACGCCCAGATCACTTATTCCCTGGCTGAGAA CACCATCCAAGGGGCAAGCCTATCGTCCTACGTGTCCATCAACTCCGACACTGGGGTACTGTATGCGCTGAGCTC CTTCGACTACGAGCAGTTCCGAGACTTGCAAGTGAAAGTGATGGCGCGGGACAACGGGCACCCGCCCCTCAGCAG CAACGTGTCGTTGAGCCTGTTCGTGCTGGACCAGAACGACAATGCGCCCGAGATCCTGTACCCCGCCCTCCCCAC GGACGGTTCCACTGGCGTGGAGCTGGCTCCCCGCTCCGCAGAGCCCGGCTACCTGGTGACCAAGGTGGTGGCGGT GGACAGAGACTCCGGCCAGAACGCCTGGCTGTCCTACCGTCTGCTCAAGGCCAGCGAGCCGGGACTCTTCTCGGT GGGTCTGCACACGGGCGAGGTGCGCACGGCGCGAGCCCTGCTGGACAGAGACGCGCTCAAGCAGAGCCTCGTAGT GGCCGTCCAGGACCACGGCCAGCCCCTCTCTCCGCCACTGTCACGCTCACCGTGGCCGTGGCCGACAGCATCCC CCAAGTCCTGGCGGACCTCGGCAGCCTCGAGTCTCCAGCTAACTCTGAAACCTCAGACCTCACTCTGTACCTGGT GGTAGCGGTGGCCGCGGTCTCCTGCGTCTTCCTGGCCTTCGTCATCTTGCTGCTGCCGCCTCAGGCTGCGGCGCTG GCACAAGTCACGCCTGCTGCAGGCTTCAGGAGGCGGCTTGACAGGAGCGCCGGCGTCGCACTTTGTGGGCGTGGA CGGGGTGCAGGCTTTCCTGCAGACCTATTCCCACGAGGTTTCCCTCACCACGGACTCGCGGAAGAGTCACCTGAT CTTCCCCCAGCCCAACTATGCAGACATGCTCGTCAGCCAGGAGAGCTTTGAAAAAAGCGAGCCCCTTTTGCTGTC AGGTGATTCGGTATTTTCTAAAGACAGTCATGGGTTAATTGAGCAAGCCCCGCCCAACACGGACTGGCGTTTCTC TCAGGCCCAGAGACCCGGCACCAGCGGCTCCCAAAATGGCGATGACACCGGCACCTGGCCCAACAACCAGTTTGA CACAGAGATGCTGCAAGCCATGATCTTGGCGTCCGCCAGTGAAGCTGCTGATGGGAGCTCCACCCTGGGAGGGGG TGCCGGCACCATGGGATTGAGCGCCCGCTACGGACCCCAGTTCACCCTGCAGCACGTGCCCGACTACCGCCAGAA TGTCTACATCCCAGGCAGCAATGCCACACTGACCAACGCAGCTGGCAAGCGGGATGGCAAGGCCCCAGCAGGTGG CTCTCCCCAACCAGCCCAGCTTCTCCTTACCTGCACCCAGGCCTCAGAGTTTCAGGGCTAACCCCCAGAATACTG GTAGGGGCCAAGGCCATGCTCCCCTTGGGAAACAGAAACAGTGCCCAGTCAGCACCTACCCCTTCCCCCCAGG GGGTTGAATATGCAAAAGCAGTTCCGCTGGGAACCCCCATCCAATCAACTGCTGTACCCATGGGGGTAGTGGGGT GGCCCATCCATCCCATGCCTCCCTCCCCCACCCCACTCCAACAGTTCCTCTTTCCCGAGTAAGGTGGTTGGGG TGTTGAAGTACCAAGTAACCTACAAGCCTCCTAGTTCTGAAAAGTTGGAAGGGCATCATGACCTCTTGGCCTCTC CTTTGATTCTCAATCTTCCCCCAAAGCATGGTTTGGTGCCAGCCCCTTCACCTCCTTCCAGAGCCCAAGATCAAT

PCT/US2003/028547

FIGURE 1730B

TTGACTTCCCCCACCTCCTCAAACAAGAGACTCCACTGCATGTTCCAAGACAGTATGGGGTGGTAAGATAAG GAAGGGAAGTGTGGATGTGGATGGTGGGGGCATGGACAAAGCTTGACACATCAAGTTATCAAGGCCTTGGAGG AGGCTCTGTATGTCCTCAGGGGACTGACAACATCCTCCAGATTCCAGCCATAAACCAATAACTAGGCTGGACCCT TCCCACTACATAATAGGGCTCAGCCCAGGCAGCCAGCTTTGGGCTGAGCTAACAGGACCAATGGATTAAACTGGC ATTTCAGTCCAAGGAAGCTCGAAGCAGGTTTAGGACCAGGTCCCCTTGAGAGGTCAGAGGGGCCTCTGTGGGTGC TTAGTCCCTGGGTTGGGGAGCAGGGAGCTAGGGCAGGGACCAAATGAACAGAAAGTCTCAGCCCAGGATGGGGC TTCTTCAACAGGGCCCCTGCCCTGAAGCCTCAGTCCTTCACCTTGCCAGGTGCCGTTTCTCTTCCGTGAAGG CCACTGCCCAGGTCCCCAGTGCGCCCCTAGTGGCCATAGCCTGGTTAAAGTTCCCCAGTGCCTCCTTGTGCATA GACCTTCTTCTCCCACCCCTTCTGCCCCTGGGTCCCCGGCCATCCAGCGGGGCTGCCAGAGAACCCCAGACCTG CCCTTACAGTAGTGTAGCGCCCCCCCCCTCTTTCGGCTGGTGTAGAATAGCCAGTAGTGTAGTGCGGTGTGCTTT GTTGTGTTTTTGTGCTGTCCACGCGCTAAGGCGACCCCCTCCCCCGTACTGACTTCTCCTATAAGCGCTTCTCT TCGCATAGTCACGTAGCTCCCACCCCACCCTCTTCCTGTGTCTCACGCAAGTTTTATACTCTAATATTTATATGG CTTTTTTCTTCGACAAAAAATAATAAAACGTTTCTTCTGAAAAGCTG

PCT/US2003/028547

FIGURE 1731

MIPARLHRDYKGLVLLGILLGTLWETGCTQIRYSVPEELEKGSRVGDISRDLGLEPRELAERGVRIIPRGRTQLF
ALNPRSGSLVTAGRIDREELCMGAIKCQLNLDILMEDKVKIYGVEVEVRDINDNAPYFRESELEIKISENAATEM
RFPLPHAWDPDIGKNSLQSYELSPNTHFSLIVQNGADGSKYPELVLKRALDREEKAAHHLVLTASDGGDPVRTGT
ARIRVMVLDANDNAPAFAQPEYRASVPENLALGTQLLVVNATDPDEGVNAEVRYSFRYVDDKAAQVFKLDCNSGT
ISTIGELDHEESGFYQMEVQAMDNAGYSARAKVLITVLDVNDNAPEVVLTSLASSVPENSPRGTLIALLNVNDQD
SEENGQVICFIQGNLPFKLEKSYGNYYSLVTDIVLDREQVPSYNITVTATDRGTPPLSTETHISLNVADTNDNPP
VFPQASYSAYIPENNPRGVSLVSVTAHDPDCEENAQITYSLAENTIQGASLSSYVSINSDTGVLYALSSFDYEQF
RDLQVKVMARDNGHPPLSSNVSLSLFVLDQNDNAPEILYPALPTDGSTGVELAPRSAEPGYLVTKVVAVDRDSGQ
NAWLSYRLKASEPGLFSVGLHTGEVRTARALLDRDALKQSLVVAVQDHGQPPLSATVTLTVAVADSIPQVLADL
GSLESPANSETSDLTLYLVVAVAAVSCVFLAFVILLLALRRWHKSRLLQASGGGLTGAPASHFVGVDGVQAFL
QTYSHEVSLTTDSRKSHLIFPQPNYADMLVSQESFEKSEPLLLSGDSVFSKDSHGLIEQAPPNTDWRFSQAQRPG
TSGSQNGDDTGTWPNNQFDTEMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHVPDYRQNVYIPGS
NATLTNAAGKRDGKAPAGGNGNKKKSGKKEKK

PCT/US2003/028547

1869/6881 FIGURE 1732A

TGCCCGGCGCTCTGTGAGCAGATCCGCTACAGGATTCCCGAGGAAATGCCCAAGGGCTCCGTAGTGGGGAAACCTC GCCACGGACCTGGGGTTCAGCGTCCAGGAGTTACCGACTCGAAAACTGCGCGTCAGTTCGGAGAAGCCTTACTTC ACCGTGAGCGCAGAGAGCGGGGAGTTGCTTGTGAGCAGCAGGCTAGACAGGGAGGAGATATGCGGGAAGAAGCCA GCTTGTGCTCTGGAATTTGAGGCTGTTGCTGAAAATCCACTGAACTTTTATCACGTGAATGTGGAGATCGAGGAC ATTAATGACCACACGCCAAAATTCACGCAAAATTCCTTTGAGCTGCAAATAAGTGAGTCTGCACAGCCTGGCACA CGATTTATATTAGGATCTGCCCATGATGCGGATATTGGTAGCAACACACTGCAGAATTACCAACTCAGTCCCAGT GATCATTTCTCACTGATAAATAAAGAGAAATCAGATGGCAGTAAATACCCTGAGATGGTATTGAAGACACCTTTG GACAGAGAAAAGCAGAAATCCTACCACTTGACTTTGACTGCCTTGGACTTTGGAGCTCCACCCCTAAGCAGCACT GCACAGATACACGTTCTAGTGACTGATGCCAATGATAATGCTCCAGTGTTCAGTCAAGACGTATACAGGGTGAGC CTTTCAGAAAACGTGTACCCGGGGACCACGGTGCTACAGGTGACTGCCACGGACCAGGATGAGGGTGTCAATGCC GAGATTACTTTCTCTTTCAGTGAAGCTAGCCAGATCACCCAATTTGACCTGAACTCTAACACCGGGGAAATTACT GTTTTAAATACATTAGATTTTGAAGAAGTCAAAGAATATTCCATAGTTTTGGAAGCAAGGGACGGTGGAGGAATG ATTGCGCAATGCACAGTGGAGGTAGAAGTCATAGATGAAAATGACAACGCCCCAGAAGTGATATTCCAGTCTCTA CCCAACCTAATTATGGAGGACGCCGAGCTGGGAACACATATTGCTTTGCTCAAAGTCCGTGACAAGGATTCCAGA CACAATGGAGAAGTGACTTGTAAATTGGAAGGTGATGTTCCATTTAAAATATTAACTTCTTCAAGAAACACGTAT AAATTAGTGACAGATGCTGTTCTAGACCGCGAGCAGAATCCAGAGTACAATATAACCGTTACGGCAACAGATCGG GGCAAGCCTCCCCTCCCAGTTCCAGCATCACCCTGCACATTGGTGATGTAAATGACAACGCTCCGGTTTTC TCACAGTCTTCCTATATAGTCCACGTGGCCGAGAACAACCCGCCTGGAGCCTCTATTTCACAAGTCAGGGCTTCT GATCCGGACTTGGGGCCCAACGGCCAAGTCTCTTACTGCATCATGGCCAGTGACCTGGAGCAGCGGGAGCTGTCA TCCTACGTGTCCATAAGCGCGGAGAGCGGGGTGGTGTTCGCGCAGCGCGCCTTCGACCACGAGCAGCTGCGCGCC TTCGAACTCACACTGCAGGCCCGCGACCAGGGCTCGCCAGCGCTCAGCGCGAACGTGAGCCTGCGCGTGTTAGTG GACGACCGCAACGACAATGCGCCACGGGTGCTGTACCCCGCGCTGGGTCCCGACGGCTCTGCGCTCTTCGATATG GTGCCGCACGCTGCAGAGCCTGGCTACTTGGTGACCAAGGTAGTGGCGGTGGACGCAGACTCAGGACACAACGCC TGGCTGTCCTACCACGTGCTGCAGGCTAGCGAGCCCGGGCTCTTCAGCCTGGGGCTGCGCACGGGCGAAGTGCGC CCACTCTCGGCCACTGCCACGTTGCACCTGGTCTTCGCCGACAGCTTGCAGGAGGTGCTGCCGGATATCACTGAC CGCCCCGACCCTCTGACCTCCAGGCTGAGCTGCAGTTTTACCTAGTGGTGGCCTTGGCCTTGATCTCAGTGCTC TTCCTCGTGGCCATGATTCTGGCCATTGCCTTGCGCCTGCGACGCTCCTCCAGCCCCGCCTCCTGGAGCTGCTTC CAGCCTGGTCTCTGTGTTAAATCCGAATCCGTGGTTCCCCCCAACTACAGCGAGGGGACTTTGCCTTATTCCTAC AATCTATGTGTTGCACATACAGGAAAGACGGAGTTTAATTTCCTAAAATGTAGTGAGCAGTTGAGTTCAGGACAA GACATACTTTGCGGTGATTCATCTGGGGCCTTATTTCCACTTTGTAATTCCAGTGAATTGACTTCCCATCAGCAA GCCCCGCCCAACACGGACTGGCGTTTCTCTCAGGCCCAGAGACCCGGCACCAGCGGCTCCCAAAATGGCGATGAC ACCGGCACCTGGCCCAACAACCAGTTTGACACAGAGATGCTGCAAGCCATGATCTTGGCGTCCGCCAGTGAAGCT GCTGATGGGAGCTCCACCCTGGGAGGGGGTGCCGGCACCATGGGATTGAGCGCCCGCTACGGACCCCAGTTCACC CTGCAGCACGTGCCCGACTACCGCCAGAATGTCTACATCCCAGGCAGCAATGCCACACTGACCAACGCAGCTGGC GGAGGCCAGGCCAAGAGCCACAGGGCGGCCTCTCCCCAACCAGCCCAGCTTCTCCTTACCTGCACCCAGGCCTCA GAGTTTCAGGGCTAACCCCCAGAATACTGGTAGGGGCCAAGGCCATGCTCCCCTTGGGAAACAGAAACAAGTGCC CAGTCAGCACCTACCCCTTCCCCCCAGGGGGTTGAATATGCAAAAGCAGTTCCGCTGGGAACCCCCATCCAATC AACTGCTGTACCCATGGGGGTAGTGGGGTTACTGTAGACACCAAGAACCATTTGCCACACCCCGTTTAGTTACAG TTCCTCTTTCCCGAGTAAGGTGGTTGGGGTGTTGAAGTACCAAGTAACCTACAAGCCTCCTAGTTCTGAAAAGTT GGAAGGGCATCATGACCTCTTGGCCTCTCCTTTGATTCTCAATCTTCCCCCAAAGCATGGTTTGGTGCCAGCCCC TTCACCTCCTTCCAGAGCCCAAGATCAATGCTCAAGTTTTGGAGGACATGATCACCATCCCCATGGTACTGATGC TTGCTGGATTTAGGGAGGGCATTTTGCTACCAAGCCTCTTCCCAACGCCCTGGGGACCAGTCTTCTGTTTTGTTT TTCATTGTTTGACGTTTCCACTGCATGCCTTGACTTCCCCCACCTCCTCAAACAAGAGACTCCACTGCATGT

PCT/US2003/028547

FIGURE 1732B

PCT/US2003/028547

1871/6881 FIGURE 1733

MGSGAGELGRAERLPVLFLFLLSLFCPALCEQIRYRIPEEMPKGSVVGNLATDLGFSVQELPTRKLRVSSEKPYF
TVSAESGELLVSSRLDREEICGKKPACALEFEAVAENPLNFYHVNVEIEDINDHTPKFTQNSFELQISESAQPGT
RFILGSAHDADIGSNTLQNYQLSPSDHFSLINKEKSDGSKYPEMVLKTPLDREKQKSYHLTLTALDFGAPPLSST
AQIHVLVTDANDNAPVFSQDVYRVSLSENVYPGTTVLQVTATDQDEGVNAEITFSFSEASQITQFDLNSNTGEIT
VLNTLDFEEVKEYSIVLEARDGGGMIAQCTVEVEVIDENDNAPEVIFQSLPNLIMEDAELGTHIALLKVRDKDSR
HNGEVTCKLEGDVPFKILTSSRNTYKLVTDAVLDREQNPEYNITVTATDRGKPPLSSSSSITLHIGDVNDNAPVF
SQSSYIVHVAENNPPGASISQVRASDPDLGPNGQVSYCIMASDLEQRELSSYVSISAESGVVFAQRAFDHEQLRA
FELTLQARDQGSPALSANVSLRVLVDDRNDNAPRVLYPALGPDGSALFDMVPHAAEPGYLVTKVVAVDADSGHNA
WLSYHVLQASEPGLFSLGLRTGEVRTARALGDRDAVRQRLLVAVRDGGQPPLSATATLHLVFADSLQEVLPDITD
RPDPSDLQAELQFYLVVALALISVLFLVAMILAIALRRSSSPASWSCFQPGLCVKSESVVPPNYSEGTLPYSY
NLCVAHTGKTEFNFLKCSEQLSSGQDILCGDSSGALFPLCNSSELTSHQQAPPNTDWRFSQAQRPGTSGSQNGDD
TGTWPNNQFDTEMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHVPDYRQNVYIPGSNATLTNAAG
KRDGKAPAGGNGNKKKSGKKEKK

PCT/US2003/028547

1872/6881 FIGURE 1734A

GACCTAGGGCTGCAACCCCAGGAGCTGGCAGATGGCGGAGTCCGCATCGTCTCCAGAGGTAGGATGCCGCTTTTC GCTCTGAATCCTAGAAGTGGCAGCTTGATCACCGCGCGCAGGATAGACCGGGAGGAGCTCTGCGCTCAGAGCATG CCGTGTCTCGTGAGTTTTAATATCCTTGTTGAGGATAAAATGAAGCTTTTTCCTGTTGAAGTAGAAATAATTGAT CCTCATTTCTCCCTGGATGTGCAACAGGGAGCCGATGGGCCTCAACATCCAGAGATGGTGCTGCAGAGTCCCTTA GACAGAGAAGAAGAAGCTGTCCACCACCTCATCCTCACAGCTTCTGATGGGGGTGAACCAGTCCGTTCAGGGACC CTCAGAATTTACATTCAGGTGGTGGATGCAAATGACAATCCTCCAGCATTTACTCAGGCACAATACCATATAAAT GTCCCCGAAAACGTGCCGCTGGGTACTCAGCTGCTCATGGTAAATGCCACTGACCCTGATGAGGGAGCCAATGGG GAAGTAACGTACTCCTTTCACAATGTAGACCACAGAGTGGCCCAAATATTTCGTTTAGATTCTTACACAGGAGAA ATATCAAATAAAGAACCACTAGATTTCGAAGAATACAAAATGTATTCAATGGAAGTTCAAGCCCAGGATGGTGCG GGGCTCATGGCTAAAGTTAAGGTACTGATCAAAGTTTTGGATGTAAATGATAATGCCCCAGAAGTGACCATCACC TCTGTCACCACTGCAGTTCCAGAAAACTTTCCTCCTGGGACCATAATTGCTCTTATCAGTGTGCATGACCAGGAC TATTACCGTTTAGTGACTGAAAGAACACTGGACAGAGAACTTATCTCTGGGTACAACATCACAATAACAGCAATA GACCAAGGAACTCCAGCTCTATCTACTGAAACTCACATTTCACTACTAGTGACAGATATCAATGACAACTCCCCA GTCTTCCATCAGGACTCCTACTCTGCCTACATTCCCGAAAACAACCCCAGAGGAGCCTCCATCTTCTCTGTGAGG GCCCACGACTTGGACAGCAATGAGAATGCACAAATCACTTACTCCCTAATAGAGGACACTATCCAGGGGGCACCC CTATCTGCCTACCTCCCATCAACTCCGACACTGGGGTCCTGTATGCGCTGCGATCCTTCGACTATGAGCAGTTC CGGGACATGCAACTGAAAGTGATGGCGCGGGACAGTGGGGATCCGCCCCTCAGCAGCAACGTGTCTCTCAGCCTA TTCCTGCTGGACCAGAACGACAACGCGCCCGAGATCCTGTACCCCGCCCTCCCCACAGATGGTTCTACCGGCGTG GAGCTGGCGCCCTCTCCGCAGAGCCCGGCTACCTGGTGACCAAGGTGGTGGCGGTGGACAGAGACTCGGGCCAG AACGCCTGGCTGTCCTACCGCCTGCTCAAGGCCAGCGAGCCGGGACTCTTCTCGGTGGGTCTGCACACGGGCGAG GTGCGCACGGCGAGCCCTGCTGGACAGAGACGCGCTCAAGCAGAGTCTCGTGGTGGCCGTCCAGGACCACGGC CAGCCCCGCTCTCCGCCACTGTCACGCTCACCGTGGCCGTGGCCGACAGGATCTCCGACATCCTGGCCGACCTG GGCAGCCTCGAGCCCTCCGCCAAACCCAACGATTCGGACCTCACTCTGTACCTGGTGGTGGCGGCGGCCGCGGTC CAGGCTTCGGGAGGCGGCTTAGCGAGCATGCCCGGTTCGCACTTTGTGGGCGTGGACGGGGTTCGGGCTTTCCTG CAGACCTATTCCCACGAGGTCTCCCTCACTGCGGACTCGCGGAAGAGCCACCTGATTTTCCCCCAGCCCAACTAT GCGGACACACTCATCAGCCAGGAGAGCTGTGAGAAAAAGGGTTTTCTATCAGCACCCCAGTCTTTACTTGAAGAC AAAAAGGAACCATTTTCTCAGCAAGCCCCGCCCAACACGGACTGGCGTTTCTCTCAGGCCCAGAGACCCGGCACC AGCGGCTCCCAAAATGGCGATGACACCGGCACCTGGCCCAACAACCAGTTTGACACAGAGATGCTGCAAGCCATG ATCTTGGCGTCCGCCAGTGAAGCTGCTGATGGGAGCTCCACCCTGGGAGGGGGTGCCGGCACCATGGGATTGAGC GCCCGCTACGGACCCCAGTTCACCCTGCAGCACGTGCCCGACTACCGCCAGAATGTCTACATCCCAGGCAGCAAT GCCACACTGACCAACGCAGCTGGCAAGCGGGATGGCAAGGCCCCAGCAGGTGGCAATGGCAACAAGAAGAAGTCG GGCAAGAAGGAGAAGAAG**TAA**CATGGAGGCCAGGCCAAGAGCCACAGGGCGGCCTCTCCCCAACCAGCCCAGCTT CTCCTTACCTGCACCCAGGCCTCAGAGTTTCAGGGCTAACCCCCAGAATACTGGTAGGGGCCAAGGCCATGCTCC CCTTGGGAAACAGAACAAGTGCCCAGTCAGCACCTACCCCTTCCCCCCAGGGGGTTGAATATGCAAAAGCAGT TCCGCTGGGAACCCCCATCCAATCAACTGCTGTACCCATGGGGGTAGTGGGGTTACTGTAGACACCAAGAACCAT CTCCTCCCCACCCCACTCCAACAGTTCCTCTTTCCCGAGTAAGGTGGTTGGGGTGTTGAAGTACCAAGTAACCTA CAAGCCTCCTAGTTCTGAAAAGTTGGAAGGGCATCATGACCTCTTGGCCTCTCCTTTGATTCTCAATCTTCCCCC AAAGCATGGTTTGGTGCCAGCCCCTTCACCTCCTTCCAGAGCCCAAGATCAATGCTCAAGTTTTGGAGGACATGA GGGGACCAGTCTTCTGTTTTGTTTTTCATTGTTTGACGTTTCCACTGCATGCCTTGACTTCCCCCACCTCCTCCT

PCT/US2003/028547

1873/6881 FIGURE 1734B

PCT/US2003/028547

FIGURE 1735

MKIQKKLTGCSRLMLLCLSLELLLEAGAGNIHYSVPEETDKGSFVGNIAKDLGLQPQELADGGVRIVSRGRMPLF
ALNPRSGSLITARRIDREELCAQSMPCLVSFNILVEDKMKLFPVEVEIIDINDNTPQFQLEELEFKMNEITTPGT
RVSLPFGQDLDVGMNSLQSYQLSSNPHFSLDVQQGADGPQHPEMVLQSPLDREEEAVHHLILTASDGGEPVRSGT
LRIYIQVVDANDNPPAFTQAQYHINVPENVPLGTQLLMVNATDPDEGANGEVTYSFHNVDHRVAQIFRLDSYTGE
ISNKEPLDFEEYKMYSMEVQAQDGAGLMAKVKVLIKVLDVNDNAPEVTITSVTTAVPENFPPGTIIALISVHDQD
SGDNGYTTCFIPGNLPFKLEKLVDNYYRLVTERTLDRELISGYNITITAIDQGTPALSTETHISLLVTDINDNSP
VFHQDSYSAYIPENNPRGASIFSVRAHDLDSNENAQITYSLIEDTIQGAPLSAYLSINSDTGVLYALRSFDYEQF
RDMQLKVMARDSGDPPLSSNVSLSLFLLDQNDNAPEILYPALPTDGSTGVELAPLSAEPGYLVTKVVAVDRDSGQ
NAWLSYRLLKASEPGLFSVGLHTGEVRTARALLDRDALKQSLVVAVQDHGQPPLSATVTLTVAVADRISDILADL
GSLEPSAKPNDSDLTLYLVVAAAAVSCVFLAFVIVLLAHRLRRWHKSRLLQASGGGLASMPGSHFVGVDGVRAFL
QTYSHEVSLTADSRKSHLIFPQPNYADTLISQESCEKKGFLSAPQSLLEDKKEPFSQQAPPNTDWRFSQAQRPGT
SGSQNGDDTGTWPNNQFDTEMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHVPDYRQNVYIPGSN
ATLTNAAGKRDGKAPAGGNGNKKKSGKKEKK

WO 2004/030615 PCT/US2003/028547

1875/6881 FIGURE 1736A

ATGGCCGCTCAAAGGAATCGCTCAAAGGAATCAAAGGATTGCAGCGGGCTGGTCCTGCTCTGCCTTTTCTTCGGG ATTCCATGGGAGGCTGGAGCCCGGCAGATCTCCTACTCAATTCCTGAGGAATTAGAGAAAGGCTCTTTCGTGGGC AACATCTCCAAGGACTTGGGTCTGGCGCCCCGGGAGCTGGCGGAGCGCGGAGTCCGCATAGTCTCCAGAGGTAGG ACGCAGCTTTTCTCTCTGAACCCGCGCAGCGGCAGCTTGATCACCGCGGGCAGGATAGACCGGGAGGAGCTCTGC GCTCAGAGCGCGCGGTGCGTGAGTTTTAATATCCTTGTGGAAGACAGGGTGAAACTTTTTGGGATAGAAATA GAAGTAACTGATATCAATGACAATGCTCCAAAATTCCAAGCAGAAAATCTAGACGTAAAAATTAATGAAAATGTC GCTGCGGGAATGCGTTTTCCTCTCCCGGAAGCTATTGATCCGGATGTGGGCGTGAACTCCCTGCAGAGCTATCAG CTCAGCCCCAATAAGCACTTCTCCCTAAGAGTTCAGAGCCGTGCCAATGGCGTCAAGTACCCGGAGCTGGTACTG GAGCACTCCCTAGATCGCGAGGAAGAGGCCATTCACCACCTGGTCCTCACCGCCTCCGACGGGGGTGACCCTCTC CGATCTGGCACTGTCCTTGTCAGTGTGACTGTCTTCGATGCAAATGACAACGCGCCGGTCTTCACCTTGCCAGAA TACCGAGTGAGTGTTCCTGAGAATTTGCCTGTGGGCACTCAGCTGACAGTCACAGCCACCGACAGGGACGAA GGTGCCAATGGAGAAGTGACATATTCATTCCGAAAATTACCTGACACGCAATTGTTGAAGTTCCAACTAAACAAA TATACTGGAGAAATAAAAATATCAGAAAATCTAGATTATGAAGAAACCGGTTTCTATGAAATAGAAATACAAGCA GAAGATGGAGGAGCATATCTTGCAACTGCAAAAGTGTTGATTACAGTAGAAGATGTAAATGACAACAGTCCAGAG CTGACCATCACGTCTCTATTTAGTCCAGTGACTGAAGATTCACCTCTGGGAACAGTCGTAGCCCTTTTAAATGTG CATGATTTAGACTCTĠAGCAGAATGGACAGGTAACCTGTTCCATTTTGGCGTATCTACCATTTAAATTAGAAAAG TCCATTGACAGTTATTACAGATTGGTGATACACAGAGCCCTTGACAGGGAACAGGTATCCTCTTACAATATCACA GTGACAGCCACAGATGGGGGAAGTCCTCCTCTATCAACGGAAGCTCACTTTATGCTACAAGTGGCAGATATCAAT GACAACCCACCTACCTTCTCAAGTCTCCTACTTTACCTATATCCCAGAGAACAACGCCAGGGGTGCCTCCATC TTCTCAGTGACAGCGCTGGACCCGGACAGCAAAGAGAATGCCCAGATTATTTACTCCCTGGCTGAAGACACCATC CAGGGGGTACCTCTGTCCTCATACATATCCATCAACTCAGACACTGGCGTCCTGTATGCACTCAGATCCTTCGAC TCGTTGAGCCTGTTTGTGCTGGACCAGAACGACAATGCGCCCGAGATCCTGTACCCCGCCCTCCCCACAGACGGT TCCACAGGCGTGGAGCTGGCGCCCCGCTCCGCAGAGCCCGGCTACCTGGTGACCAAGGTGGTGGCGGTGGACAGA GACTCCGGCCAGAACGCCTGGCTGTCCTACCGTCTGCTCAAGGCCAGCGAGCCGGGACTCTTCGCGGTGGGGGAG CACACGGGCGAGGTGCGCACGGCGCGAGCCCTGCTGGACAGAAGCGCGCTCAAGCAAAGCCTCGTAGTGGCCGTC CAGGACCACGCCAGCCCCTCTCTCCGCCACTGTCACGCTCACCGTGGCCGTGGCCGACAGCATCCCCCAAGTC CTGGCGGACCTCGGCAGCTTCGAGTCTCCAGCTAACTCTGAAACCTCAGACCTCACTCTGTACCTGGTGGTAGCG GTGGCCGCGGTCTCCTGCGTCTTCCTGGCCTTCGTCATCGTGCTGCTGCGCACAGGCTGCGGCGCTGGCACAAG TCACGCCTGCTGCAGGCTTCAGGAGGCGGCTTGACAGGTGTGTCCGGCTCGCACTTTGTGGGCGTGGACGGGGTT CGGGCTTTCCTGCAGACCTATTCCCACGAGGTCTCTCTCACCGCGGACTCGCGAAAGAGTCACCTGATCTTCCCC CAGCCCAATTATGCGGACACGCTCATCAGCCAGGAGAGCTGTGAGAAAAACGATCCTTTGTCTTTGTTAGATGAT TCGAAGTTTCCTATAGAGGATACCCCATTGGTTCCACAAGCCCCGCCCAACACGGACTGGCGTTTCTCTCAGGCC CAGAGACCCGGCACCAGCGGCTCCCAAAATGGCGATGACACCGGCACCTGGCCCAACAACCAGTTTGACACAGAG ATGCTGCAAGCCATGATCTTGGCGTCCGCCAGTGAAGCTGCTGATGGGAGCTCCACCCTGGGAGGGGGTGCCGGC ACCATGGGATTGAGCGCCCGCTACGGACCCCAGTTCACCCTGCAGCACGTGCCCGACTACCGCCAGAATGTCTAC ATCCCAGGCAGCAATGCCACACTGACCAACGCAGCTGGCAAGCGGGATGGCAAGGCCCCAGCAGGTGGCAATGGC AACAAGAAGAAGTCGGGCAAGAAGGAGAAGAAGTAACATGGAGGCCAGGCCAAGAGCCACAGGGCGGCCTCTCCC CAACCAGCCCAGCTTCTCCTTACCTGCACCCAGGCCTCAGAGTTTCAGGGCTAACCCCCAGAATACTGGTAGGGG CCAAGGCCATGCTCCCCTTGGGAAACAGAAACAGTGCCCAGTCAGCACCTACCCCTTCCCCCCAGGGGGTTGA ATATGCAAAAGCAGTTCCGCTGGGAACCCCCATCCAATCAACTGCTGTACCCATGGGGGTAGTGGGGTTACTGTA CCATCCCATGCCTCCTCCCCACCCCACTCCAACAGTTCCTCTTTCCCGAGTAAGGTGGTTGGGGTGTTGAA GTACCAAGTAACCTACAAGCCTCCTAGTTCTGAAAAGTTGGAAGGGCATCATGACCTCTTGGCCTCTCCTTTGAT TCTCAATCTTCCCCCAAAGCATGGTTTGGTGCCAGCCCCTTCACCTCCTTCCAGAGCCCAAGATCAATGCTCAAG

PCT/US2003/028547

1876/6881 FIGURE 1736B

PCT/US2003/028547

1877/6881 FIGURE 1737

MAAQRNRSKESKDCSGLVLLCLFFGIPWEAGARQISYSIPEELEKGSFVGNISKDLGLAPRELAERGVRIVSRGR
TQLFSLNPRSGSLITAGRIDREELCAQSARCVVSFNILVEDRVKLFGIEIEVTDINDNAPKFQAENLDVKINENV
AAGMRFPLPEAIDPDVGVNSLQSYQLSPNKHFSLRVQSRANGVKYPELVLEHSLDREEEAIHHLVLTASDGGDPL
RSGTVLVSVTVFDANDNAPVFTLPEYRVSVPENLPVGTQLLTVTATDRDEGANGEVTYSFRKLPDTQLLKFQLNK
YTGEIKISENLDYEETGFYEIEIQAEDGGAYLATAKVLITVEDVNDNSPELTITSLFSPVTEDSPLGTVVALLNV
HDLDSEQNGQVTCSILAYLPFKLEKSIDSYYRLVIHRALDREQVSSYNITVTATDGGSPPLSTEAHFMLQVADIN
DNPPTFSQVSYFTYIPENNARGASIFSVTALDPDSKENAQIIYSLAEDTIQGVPLSSYISINSDTGVLYALRSFD
YEQFHELQMQVTASDSGDPPLSSNVSLSLFVLDQNDNAPEILYPALPTDGSTGVELAPRSAEPGYLVTKVVAVDR
DSGQNAWLSYRLLKASEPGLFAVGEHTGEVRTARALLDRDALKQSLVVAVQDHGQPPLSATVTLTVAVADSIPQV
LADLGSFESPANSETSDLTLYLVVAVAAVSCVFLAFVIVLLAHRLRRWHKSRLLQASGGGLTGVSGSHFVGVDGV
RAFLQTYSHEVSLTADSRKSHLIFPQPNYADTLISQESCEKNDPLSLLDDSKFPIEDTPLVPQAPPNTDWRFSQA
QRPGTSGSQNGDDTGTWPNNQFDTEMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHVPDYRQNVY
IPGSNATLTNAAGKRDGKAPAGGNGNKKKSGKKEKK

PCT/US2003/028547

1878/6881 FIGURE 1738A

GCCTCTACCACAAAGCGGAATGAGATGGATACTCACAGATCCTGACACTGGAGACTTAGAAGTATTTTCCTTC GAGAAACCGCGGAATATCGGCTTAGAGCCTGCC<u>ATG</u>GCGAATCGGCTACAGCGCGGGGACCGCAGTCGGCTGCTG CTGCTGCTGTGCATTTTCCTGGGGACGCTGCGGGGGTTCCGGGCCAGGCAGATCCGATATTCGGTGCCAGAAGAG ACCGAAAAGGGCTCCTTCGTGGGCAATATCTCCAAGGACCTGGGGCTGGAGCCCCGGGAGCTGGCGAAGCGCGGA GTCCGCATCGTCTCCAGAGGGAAGACACAGCTTTTCGCTGTGAATCCGCGAAGCGGCAGCTTGATCACGGCAGGC AGGATAGACCGGGAGGAGCTCTGTGAGACGGTGTCCTCCTGTTTTTTAAATATGGAACTTCTCGTGGAAGACACC TTGAAGATTTACGGAGTGGAGGTGGAAATAATAGATATTAATGATAACGCCCCCAGCTTCCAGGAGGACGAAGTG GAGATAAAAGTCAGTGAGCACGCAATTCCTGGGGCGCGATTTGCTCTTCCTAATGCTAGGGATCCAGATGTGGGC GTGAACTCCCTCCAGAGCTACCAGCTCAGCCCTAATAATTACTTTTCCTTGCAACTGCGGGGCAGAACGGATGGG GCCAAGAATCCAGAGCTAGTACTGGAGGGAAGCCTGGACCGAGAGAAAGAGGCTGCTCACCTGCTCCTCACA GCTTTAGATGGAGGCGATCCCATCCGAAAGGGCGCAGTTCCCATTCGTGTGGTGGTCCTCGATGTAAATGATCAC ATCCCAATGTTTACACAGTCCGTATATCGCGTGAGTGTTCCAGAAAACATCAGCTCCGGAACTCGGGTGCTGATG GTTAATGCAACGGATCCAGACGAGGGAATCAACGGGGAAGTAATGTATTCATTTCGGAACATGGAAAGCAAGGCT TCTGAAATATTCCAATTGGATTCACAAACTGGAGAAGTTCAAGTACGGGGGTCTCTGGATTTTGAAAAATATAGA TTCTATGAGATGGAAATTCAAGGCCAAGATGGTGGAGGTCTCTTTACCACCACGACGATGTTGATCACTGTTGTG GATGTGAATGATAACGCTCCAGAAATAACTATCACCTCTTCTATTAATTCAATTCTGGAAAACTCTCCTCCAGGT ACAGTGATTGCTCTTCTAAATGTGCAAGATCAAGATTCTGGAGAAAATGGTCAAGTCTCCTGTTTTATTCCTAAC CACCTGCCTTTTAAATTAGAAAAGACTTATGGAAATTATTACAAATTGATAACAAGCAGAGTGCTGGACAGGGAG TTGGTCCAGAGCTACAATATAACGTTGACAGCCACAGACCAGGGAAGCCCGCCTTTGTCTGCAGAAACTCATGTC TGGCTGAATGTGGCAGATGACAACGATAACCCTCCCGTTTTTCCTCACTCCTCTTACTCTGCCTACATTCCCGAA AACAACCCCAGGGGTGCCTCCATCTTCTCAGTGACCGCCCTCGACCCGGACAGCAAACAGAATGCCCTGGTCACT TACTCTCTGACGGATGACACTGTCCAGGGGGTGCCTCTGTCCTCTATGTCTCTATTAACTCCAACACTGGTGTT CTCTATGCCCTACAATCCTTCGACTATGAGCAGTTTCGAGACTTAGAACTGAGAGTGATAGCACGTGACAGCGGG GACCCGCCCTCAGCAGCAACGTGTCGCTGAGCCTGTTCGTGCTGGACCAGAACGACAATGCGCCCGAGATCCTG TACCCTGCCCTCCCCACAGACGCTCCACTGGCGTGGAGCTGGCGCCCCGCTCTGCGGAACCTGGCTACCTGGTG ACCAAGGTGGTTGCGGTGGACAAAGATTCAGGCCAGAACGCCTGGCTGTCCTATCGCCTGCTTAAGGCCAGCGAG CCGGGACTCTTCGCGGTGGGGGAGCACACGGGCGAGGTGCGTACAGCGCGGGCACTGCTGGACAGAGACGCGCTC AAGCAGAGCCTCGTGGTGGCCGTCCAGGACCACGGCCAGCCCCTCTCTCGGCCACCGTCACGCTCACCGTGGCT GTGGCCGACAGCATCCCCGAAGTCCTGGCGGACCTCGGCAGCCTCGAGTCTCTGGCTAACTCTGAAACCTCAGAC CTCTCGCTGTACTTGGTGGTGGCGGTGGCCGCAGTCTCCTGCATCTTCCTGGTCTTTGTCATCGTGCTGCTGCA CTCAGGCTGTGGCGCTGGCATAAGTCACGCCTGCTGCAGGCTTCTGAAGGCGGGTTGGCAGGTATGCCCACGTCA CAGAAGAGTCACCTGATTTTCCCCCAGCCCAACTATGGGGACACGCTCATCAGCCAGGAGAGAGCTGTGAGAAAAGC GAGCCACTCTTGATAGCTGAAGACTCAGCTATCATTTTAGGCAAATGTGACCCGACAAGTAATCAGCAAGCCCCG CCCAACACGGACTGGCGTTTCTCTCAGGCCCAGAGACCCGGCACCAGCGGCTCCCAAAATGGCGATGACACCGGC ACCTGGCCCAACAACCAGTTTGACACAGAGATGCTGCAAGCCATGATCTTGGCGTCCGCCAGTGAAGCTGCTGAT GGGAGCTCCACCCTGGGAGGGGTGCCGGCACCATGGGATTGAGCGCCCGCTACGGACCCCAGTTCACCCTGCAG CACGTGCCCGACTACCGCCAGAATGTCTACATCCCAGGCAGCAATGCCACACTGACCAACGCAGCTGGCAAGCGG GATGGCAAGGCCCCAGCAGGTGGCAATGGCAACAAGAAGAAGTCGGGCAAGAAGGAGAAGAAGTAACATGGAGGC CAGGCCAAGAGCCACAGGGCGGCCTCTCCCCAACCAGCCCAGCTTCTCCTTACCTGCACCCAGGCCTCAGAGTTT CAGGGCTAACCCCCAGAATACTGGTAGGGGCCAAGGCCATGCTCCCCTTGGGAAACAGAAACAAGTGCCCAGTCA GCACCTACCCCTTCCCCCCAGGGGGTTGAATATGCAAAAGCAGTTCCGCTGGGAACCCCCATCCAATCAACTGC TGTACCCATGGGGGTAGTGGGGTTACTGTAGACACCAAGAACCATTTGCCACACCCCGTTTAGTTACAGCTGAAC TTTCCCGAGTAAGGTGGTTGGGGTGTTGAAGTACCAAGTAACCTACAAGCCTCCTAGTTCTGAAAAGTTGGAAGG GCATCATGACCTCTTGGCCTCTCTTTGATTCTCAATCTTCCCCCAAAGCATGGTTTGGTGCCAGCCCCTTCACC

PCT/US2003/028547

1879/6881 FIGURE 1738B

GTTTGACGTTTCCACTGCATGCCTTGACTTCCCCCACCTCCTCAAACAAGAGACTCCACTGCATGTTCCAAG TCAAGTTATCAAGGCCTTGGAGGAGGCTCTGTATGTCCTCAGGGGACTGACAACATCCTCCAGATTCCAGCCATA CAGGACCAATGGATTAAACTGGCATTTCAGTCCAAGGAAGCTCGAAGCAGGTTTAGGACCAGGTCCCCTTGAGAG GTCAGAGGGGCCTCTGTGGGTGCTGGGTACTCCAGAGGTGCCACTGGTGGAAGGGTCAGCGGAGCCCCAGCAGGA AGGGTGGGCCAGCCAGGCCATTCTTAGTCCCTGGGTTGGGGAGGCAGGGAGCTAGGGCAGGGACCAAATGAACAG AAAGTCTCAGCCCAGGATGGGGCTTCTTCAACAGGGCCCCTGCCCTCCTGAAGCCTCAGTCCTTCACCTTGCCAG GTGCCGTTTCTCTTCCGTGAAGGCCACTGCCCAGGTCCCCAGTGCGCCCCTAGTGGCCATAGCCTGGTTAAAGT TCCCCAGTGCCTCCTTGTGCATAGACCTTCTTCTCCCACCCCCTTCTGCCCCTGGGTCCCCGGCCATCCAGCGGG TTGATCTGCCCGCGGCGCCCGTGTTGTGTTTTTGTGCTGTGTCCACGCGCTAAGGCGACCCCCTCCCCCGTACTG ACTTCTCCTATAAGCGCTTCTCTCGCATAGTCACGTAGCTCCCACCCCACCCTCTTCCTGTGTCTCACGCAAGT TTTATACTCTAATATTTATATGGCTTTTTTTCTTCGACAAAAAAATAATAAAACGTTTCTTCTGAAAAGCTG

PCT/US2003/028547

FIGURE 1739

MANRLQRGDRSRLLLLCIFLGTLRGFRARQIRYSVPEETEKGSFVGNISKDLGLEPRELAKRGVRIVSRGKTQL
FAVNPRSGSLITAGRIDREELCETVSSCFLNMELLVEDTLKIYGVEVEIIDINDNAPSFQEDEVEIKVSEHAIPG
ARFALPNARDPDVGVNSLQSYQLSPNNYFSLQLRGRTDGAKNPELVLEGSLDREKEAAHLLLLTALDGGDPIRKG
AVPIRVVVLDVNDHIPMFTQSVYRVSVPENISSGTRVLMVNATDPDEGINGEVMYSFRNMESKASEIFQLDSQTG
EVQVRGSLDFEKYRFYEMEIQGQDGGGLFTTTTMLITVVDVNDNAPEITITSSINSILENSPPGTVIALLNVQDQ
DSGENGQVSCFIPNHLPFKLEKTYGNYYKLITSRVLDRELVQSYNITLTATDQGSPPLSAETHVWLNVADDNDNP
PVFPHSSYSAYIPENNPRGASIFSVTALDPDSKQNALVTYSLTDDTVQGVPLSSYVSINSNTGVLYALQSFDYEQ
FRDLELRVIARDSGDPPLSSNVSLSLFVLDQNDNAPEILYPALPTDGSTGVELAPRSAEPGYLVTKVVAVDKDSG
QNAWLSYRLKASEPGLFAVGEHTGEVRTARALLDRDALKQSLVVAVQDHGQPPLSATVTLTVAVADSIPEVLAD
LGSLESLANSETSDLSLYLVVAVAAVSCIFLVFVIVLLALRLWRWHKSRLLQASEGGLAGMPTSHFVGVDGVQAF
LQTYSHEVSLIADSQKSHLIFFQPNYGDTLISQESCEKSEPLLIAEDSAIILGKCDPTSNQQAPPNTDWRFSQAQ
RPGTSGSQNGDDTGTWPNNQFDTEMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHVPDYRQNVYI
PGSNATLTNAAGKRDGKAPAGGNGNKKKSGKKEKK

PCT/US2003/028547

1881/6881 FIGURE 1740A

AAGGGGGTGGAGGTTTGGCCCTAAAGCTTCAGGACACCAAAGAAATTCAGTCGAACAGCCCACCAGTTCTCTCCA TAGGGACCTGGGTCCCGTGAATGCTGGTTATCTCACACCCTGAGGAATAAAGATTGGAATCCGCACTGGATGCTG GAAGTTGACTCGGAGAAAATTGCGACAGGAGGGAA<u>ATG</u>GCGGCTCTGCAAAAGTTGCCACACTGCAGAAAGCTGG TCCTGCTGTGCTTCCTTTTGGCGACCCTGTGGGAGGCCAGGGCCGGGCAGATTCGCTATTCTGTGCGGGAAGAGA TCGACAGAGGCTCCTTCGTAGGCAACATCGCCAAGGACTTGGGTTTGGAGCCCCTGGCACTGGCAGAGCAGGAGGAG TCCGCATCGTCTCCAGAGGTAGGTCCCAGCTCTTTGCTCTGAACCCGCGAAGCGGCAGCTTGGTCACTGCGAACA TGACTATTTATTCAGTAGAGGTGGAAATAACAGATATTAACGATAATGCCCCTCGCTTTGGAGTAGAGGAACTGG AGCTAAAAATCAGTGAAACCACTACGCCAGGATTCCGGATTCCTCTTAAGAATGCGCATGATGCAGACGTAGGTG AGAACGCCCTTCAGAAGTACGCACTCAACCCAAATGACCACTTCTCCCTGGACGTGCGAAGGGGAGCTGATGGGA ACAAGTACCCAGAACTGGTGCTGGAGCGCTCTCTGGACCGCGAGGAAGAGGCTGTTCACCACCTCGTTCTCGTGG CTTCTGATGGGGGTGACCCAGTGCTATCTGGCACCTCCCGCATCTGCGTGAAGGTCCTGGATGCGAACGACAATG CGCCTGTTTTTACACAGCCCGAGTACCGCATAAGCATTCCGGAGAATACGCTCGTGGGCACCCGGATACTCACGG TGACCGCCACTGACGCAGATGAGGGCTACTACGCTCAAGTGGTATATTTTCTAGAGAAAAGCCCTGGAGAAACCT CAGAGGTATTTGAGCTTAAGTCAACATCTGGAGAACTGACAATCATAAAAGATCTAGATTATGAGGATGCTACAT TCCATGAAATTGATATTGAAGCTCAGGATGGTCCGGGCCTTCTAACCAGAGCGAAGGTTATCGTCACGGTTCTGG ATGTGAATGACAATGCCCCAGAATTTTACATGACATCTGCTACTAGCTCAGTTTCTGAAGACTCTCTTCCAGGAA CCATAATTGGGCTTTTTAATGTACATGATAGAGACTCTGGGCAGAACGCATTCACCACCTGTTCACTCCCCGAGG ATCTTCCTTTTAAGTTAGAAAAGTCAGTAGACAATTACTACCGACTGGTTACAACCAGAGCCCTTGACAGGGAAC TGCTCCAGGTGGCAGACATCAACGACAACGCACCCGCCTTCTCCCGCACATCCTACTCCACCTACATTCCCGAAA ACAACCCCAGAGGAGCCTCTGTCTTCTCAGTGACGGCCCATGACCCCGACAGCAACGACAATGCTCATGTAACTT ACTCTTTCGCGGAGGACACTGTTCAGGGGGCACCCTTATCCTCTTACATCTCTATCAACTCCGACACTGGAGTAC TCTATGCACTGCGCTCCTTTGATTATGAGCAGTTGCGAGACTTGCAAGTGTGGGTGATAGCGCGGGACAGCGGGA ACCCTCCACTCAGTAGCAATGTATCATTAAGCCTGTTCGTGCTGGACCAGAACGACAACGCCCCGAGATCCTGT ACCCTGCCTTCCCCACAGACGGTTCCACTGGCGTGGAGCTGGCGCCCCGCTCCGCAGAGCCCGGCTACCTGGTGA $\verb|CCAAGGTGGTGGCGGTGGACAGAGGCCAGAACGCCTGGCTGTCTTACCACCTGCTCAAGGCCAGCGAGC| \\$ CGGGACTCTTCTCGGTGGGTCTGCACACGGGCGAGGTGCGCACGGCGCGAGCCCTGCTGGACAGAGACGCGCTCA AGCAGAGCCTCGTGGTGGCCATCCAGGACCACGGCCAGCCCCTCTCTCCGCCACTGTCACGCTCACCGTGGCCG TGGCCGACAGGATCCCCGACATCCTGGCCGACCTGGGCAGCCTCGAGCCCTCCGCCATACCCAACGATTCGGACC TCACTCTGTACCTGGTGGTGGCGGTGGCCGCGGTCTCCTGCGTCTTCCTGGCCTTCGTCATCGTGTTGCTGGCGC ACAGGCTGCGCGCTGCCACGCCTGCTGCAGGCTTCAGGAGGCAGCTTGACAGGCATGCAGAGCTCGC ACTTTGTGGGCGTGGACGGGGTTCGGGCTTTCCTGCAGACCTATTCCCACGAGGTCTCCCTCACTGCGGACTCGC GGAAGAGCCACCTGATTTTCCCCCAGCCCAACTATGCGGACACGCTCATCAGCCAGGAGAGCTGTGAGAAAAAAGG CGGACTGGCGTTTCTCTCAGGCCCAGAGACCCGGCACCAGCGGCTCCCAAAATGGCGATGACACCGGCACCTGGC CCAACAACCAGTTTGACACAGAGATGCTGCAAGCCATGATCTTGGCGTCCGCCAGTGAAGCTGCTGATGGGAGCT CCACCCTGGGAGGGGTGCCGGCACCATGGGATTGAGCGCCCGCTACGGACCCCAGTTCACCCTGCAGCACGTGC CCGACTACCGCCAGAATGTCTACATCCCAGGCAGCAATGCCACACTGACCAACGCAGCTGGCAAGCGGGATGGCA AGGCCCCAGCAGGTGGCAATGGCAACAAGAAGAAGTCGGGCAAGAAGAAGAAGAAG<u>TAA</u>CATGGAGGCCAGGCCA AGAGCCACAGGGCGGCCTCTCCCCAACCAGCCCAGCTTCTCCTTACCTGCACCCAGGCCTCAGAGTTTCAGGGCT AACCCCCAGAATACTGGTAGGGGCCAAGGCCATGCTCCCCTTGGGAAACAGAAACAAGTGCCCAGTCAGCACCTA CCCCTTCCCCCCAGGGGGTTGAATATGCAAAAGCAGTTCCGCTGGGAACCCCCATCCAATCAACTGCTGTACCC AGTAAGGTGGTTGGGGTGTTGAAGTACCAAGTAACCTACAAGCCTCCTAGTTCTGAAAAGTTGGAAGGGCATCAT GACCTCTTGGCCTCTCTTGATTCTCAATCTTCCCCCAAAGCATGGTTTGGTGCCAGCCCCTTCACCTCCTTCC

PCT/US2003/028547

FIGURE 1740B

GGAGGGCATTTTGCTACCAAGCCTCTTCCCAACGCCCTGGGGACCAGTCTTCTGTTTTGTTTTCATTGTTTGAC GTTTCCACTGCATGCCTTGACTTCCCCCACCTCCTCAAACAAGAGACTCCACTGCATGTTCCAAGACAGTAT ATCAAGGCCTTGGAGGAGGCTCTGTATGTCCTCAGGGGACTGACAACATCCTCCAGATTCCAGCCATAAACCAAT AATGGATTAAACTGGCATTTCAGTCCAAGGAAGCTCGAAGCAGGTTTAGGACCAGGTCCCCTTGAGAGGTCAGAG GGGCCTCTGTGGGTGCTGGGTACTCCAGAGGTGCCACTGGTGGAAGGGTCAGCGGAGCCCCAGCAGGAAGGGTGG GCCAGCCAGGCCATTCTTAGTCCCTGGGTTGGGGAGGCAGGGAGCTAGGGCAGGGACCAAATGAACAGAAAGTCT CAGCCCAGGATGGGGCTTCTTCAACAGGGCCCCTGCCCTCCTGAAGCCTCAGTCCTTCACCTTGCCAGGTGCCGT TTCTCTTCCGTGAAGGCCACTGCCCAGGTCCCCAGTGCGCCCCTAGTGGCCATAGCCTGGTTAAAGTTCCCCAG TGCCTCCTTGTGCATAGACCTTCTTCTCCCACCCCTTCTGCCCCTGGGTCCCCGGCCATCCAGCGGGGCTGCCA TAGTGCGGTGTGCTTTTACGTGATGGCGGGTGGGCAGCGGCGGCGGCGGCGCCGCCGCAGCCGTCTGTCCTTGATCT CTATAAGCGCTTCTCTCGCATAGTCACGTAGCTCCCACCCCACCCTCTTCCTGTGTCTCACGCAAGTTTTATAC TCTAATATTTATATGGCTTTTTTTCTTCGACAAAAAAATAATAAAACGTTTCTTCTGAAAAGCTG

PCT/US2003/028547

FIGURE 1741

MAALQKLPHCRKLVLLCFLLATLWEARAGQIRYSVREEIDRGSFVGNIAKDLGLEPLALAEQGVRIVSRGRSQLF
ALNPRSGSLVTANRIDREELCAQSAPCLLNFNILLEDKLTIYSVEVEITDINDNAPRFGVEELELKISETTTPGF
RIPLKNAHDADVGENALQKYALNPNDHFSLDVRRGADGNKYPELVLERSLDREEEAVHHLVLVASDGGDPVLSGT
SRICVKVLDANDNAPVFTQPEYRISIPENTLVGTRILTVTATDADEGYYAQVVYFLEKSPGETSEVFELKSTSGE
LTIIKDLDYEDATFHEIDIEAQDGPGLLTRAKVIVTVLDVNDNAPEFYMTSATSSVSEDSLPGTIIGLFNVHDRD
SGQNAFTTCSLPEDLPFKLEKSVDNYYRLVTTRALDREQFSFYNITLTAKDGGNPSLSTDAHILLQVADINDNAP
AFSRTSYSTYIPENNPRGASVFSVTAHDPDSNDNAHVTYSFAEDTVQGAPLSSYISINSDTGVLYALRSFDYEQL
RDLQVWVIARDSGNPPLSSNVSLSLFVLDQNDNAPEILYPAFPTDGSTGVELAPRSAEPGYLVTKVVAVDRDSGQ
NAWLSYHLLKASEPGLFSVGLHTGEVRTARALLDRDALKQSLVVAIQDHGQPPLSATVTLTVAVADRIPDILADL
GSLEPSAIPNDSDLTLYLVVAVAAVSCVFLAFVIVLLAHRLRRWHKSRLLQASGGSLTGMQSSHFVGVDGVRAFL
QTYSHEVSLTADSRKSHLIFPQPNYADTLISQESCEKKDFLSAPQSLLEEEREETFSQQAPPNTDWRFSQAQRPG
TSGSQNGDDTGTWPNNQFDTEMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHVPDYRQNVYIPGS
NATLTNAAGKRDGKAPAGGNGNKKKSGKKEKK

PCT/US2003/028547

1884/6881 FIGURE 1742A

ATCACCAATTGCCTGAGTTTCCGAAATGGCAGAGGACTGGCCCTGCTGTGCGCGCTCCTGGGGACGCTGTGCGAA ACAGGATCCGGTCAGATCCGCTACTCGGTGTCTGAGGAGCTAGATAAAGGTTCCTTCGTGGGCAACATCGCTAAC GACCTGGGGCTAGAGCCCCGGGAGCTGGCGGAGCGCGGAGTCCGCATCGTCTCCAGAGGTAGGACGCAGCTTTTC TCTCTGAATCCGCAAAGCGGCAGCTTGGTCACCGCGGAGAGGATAGACCGGGAGGAGCTCTGCGCTCAGATCCCG CTGTGTCTGGTAAAAATTAACATTCTGGTTGAGGATAAATTGAAAATTTTTGAAGTAGAAATAGAAATTAAAGAT ATTAATGATAATGCTCCTAATTTCCCAACAGAGGAATTGGAAATAAAAATTGGTGAACTAACGGTTCCTGGAACC CGATTTCCAATTAAAACTGCTTTTĠACCCAGATGTAGGCATTAACTCCCTGCAGAACTACAAGCTTAGCCCCAAT GACTACTTCTCTCTGGCTGTGAATAGCGTCTCTGAGGGGGCCCAAGTATCCAGAGCTGGTGCTGGAGCGGGCCCTG GACCGTGAGAAAAAAGAAATTCACCAGCTTGTCCTGGTTGCCTCTGATGGTGGCGACCCTGTCCACTCTGGCAAC TTGCACATCCAAGTGATAGTCCTGGATGCAAATGACAACCCACCAATGTTTACTCAGCCTGAGTACCGTGTGAGT GTTTGGGAGAACGTGCCTGTGGGTACCCGGCTGCTCACGGTGAATGCCACTGACCCTGACGAGGGATTCAATGCT GTATCAATATTAAAAAGTCTAGATTATGAGGATGCCATGTTCTATGAAATTAAAATTGAAGCACAGGATGGACCA GGTCTTCTTCAAGAGCCAAGATTCTAGTCACGGTTCTGGATGTGAATGACAATGCTCCAGAAATTACAATCACG TCTCTCACAAGCTCAGTCCCAGAAGAGGGCACCGTTGGAAGAGAAATTGCTCTTATCGACGTGCATGACCGAGAT TCTGGGCAGAATGGGCAGGTTGAAGTTTTTGTCCTGGGAAATCTGCCATTTAAGTTAGAAAAAATCAATAGATCAA TATTACCGCTTAGTGACGGCCACATCCCTGGACCGCGAACAAATATCAGAATATAACATTAGTCTGAGAGCCTCA ACCTTCCCTCATTTATCCTACTCCGCCTACATTCCAGAAAACAACCCCAGAGGAGCCTCCATCTTCTCAGTGACA GCCCAGGACCCAGATAGCAACAACGCCCGCATCACTTATGCATTGACCGAGGACACTCTCCAGGGGGCGCCC CTGTCCTCCTTCGTCTCTATCAACTCCAACACTGGCGTCCTATACGCGCTGAGATCCTTCGACTACGAGCAATTT AGAGACTTAAAGCTACTGGTGACAGCCAGCGACAGCGGGAACCCTCCACTCAGCAGCAACGTGTCGCTGAACCTG TTCGTGCTGGACCAGAACGACAACGCGCCCGAGATCCTGTACCCCGCCCTCCCCACAGACGGTTCCACTGGCGTG GAGCTGGCGCCTCGCTCCGCAGAGCCCGGCTACCTGGTGACCAAGGTGGTGGCGGTGGACAGAGACTCGGGCCAG AACGCCTGGCTGTCCTACCGCCTGCTCAAGGCCAGCGAGCCGGGACTCTTCTCGGTGGGTCTGCACACGGGCGAG GTGCGCACGGCGCGAGCCCTGCTGGACAGAGACGCGCTCAAGCAGAGCCTCGTGGTGGCCGTCCAGGACCACGGC CAGCCCCTCTCTCCGCCACTGTCACGCTCACCGTGGCCGTGGCCGACAGGATCCCGGACATCCTGGCCGACCTG GGCAGCCTCGAGCCCTCCGCCAAACCCAACGATTCGGACCTCACTCTGTACCTGGTGGTGGCGGTGGCCGCGGTC TCCTGCGTCTTCCTGGCCTTCGTCATCGTGCTGCTGCTGCTCAGGCTGCGCGCTGGCACAAGTCACGCCTGCTG CAGGCTTCGGGAGGCGGCTTGGCGAGTACGCCCGGCTCGCACTTTGTGGGCGCGGACGGGGTTCGGGCTTTCCTG CAGACCTATTCCCACGAGGTCTCCCTCACTGCGGACTCGCGGAAGAGCCACCTGATTTTCCCCCAGCCCAACTAT GCGGACACGCTCATCAGCCAGGAGAGCTGTGAGAAAAGCGAGCCTCTTCTGATAACTCAGGATTTACTTGAAATG AAAGGAGATTCCAACCTACTTCAGCAAGCCCCGCCCAACACGGACTGGCGTTTCTCTCAGGCCCAGAGACCCGGC ACCAGCGGCTCCCAAAATGGCGATGACACCGGCACCTGGCCCAACAACCAGTTTGACACAGAGATGCTGCAAGCC ATGATCTTGGCGTCCGCCAGTGAAGCTGCTGATGGGAGCTCCACCCTGGGAGGGGGTGCCGGCACCATGGGATTG AGCGCCCGCTACGGACCCCAGTTCACCCTGCAGCACGTGCCCGACTACCGCCAGAATGTCTACATCCCAGGCAGC $\verb|CTTCTCCTTACCTGCACCCAGGCCTCAGAGTTTCAGGGGCTAACCCCCAGAATACTGGTAGGGGCCAAGGCCATGC| \\$ TCCCCTTGGGAAACAGAACAGTGCCCAGTCAGCACCTACCCCTTCCCCCCAGGGGGTTGAATATGCAAAAGC AGTTCCGCTGGGAACCCCCATCCAATCAACTGCTGTACCCATGGGGGTAGTGGGGGTTACTGTAGACACCAAGAAC TCCCTCCTCCCCACCCCACTCCAACAGTTCCTCTTTCCCGAGTAAGGTGGTTGGGGTGTTGAAGTACCAAGTAAC CTACAAGCCTCCTAGTTCTGAAAAGTTGGAAGGGCATCATGACCTCTTGGCCTCTCGATTCTCAATCTTCC CCCAAAGCATGGTTTGGTGCCAGCCCCTTCACCTCCTTCCAGAGCCCAAGATCAATGCTCAAGTTTTGGAGGACA CCTGGGGACCAGTCTTCTGTTTTGTTTTCATTGTTTGACGTTTCCACTGCATGCCTTGACTTCCCCCACCTCCT

PCT/US2003/028547

1885/6881 FIGURE 1742B

PCT/US2003/028547

1886/6881 FIGURE 1743

MTNCLSFRNGRGLALLCALLGTLCETGSGQIRYSVSEELDKGSFVGNIANDLGLEPRELAERGVRIVSRGRTQLF
SLNPQSGSLVTAERIDREELCAQIPLCLVKINILVEDKLKIFEVEIEIKDINDNAPNFPTEELEIKIGELTVPGT
RFPIKTAFDPDVGINSLQNYKLSPNDYFSLAVNSVSEGAKYPELVLERALDREKKEIHQLVLVASDGGDPVHSGN
LHIQVIVLDANDNPPMFTQPEYRVSVWENVPVGTRLLTVNATDPDEGFNAQVSYILDKMPGKIAEIFHLNSVSGE
VSILKSLDYEDAMFYEIKIEAQDGPGLLSRAKILVTVLDVNDNAPEITITSLTSSVPEEGTVGREIALIDVHDRD
SGQNGQVEVFVLGNLPFKLEKSIDQYYRLVTATSLDREQISEYNISLRASDGGSPPLSTETHITLHVIDINDNPP
TFPHLSYSAYIPENNPRGASIFSVTAQDPDSNNNARITYALTEDTLQGAPLSSFVSINSNTGVLYALRSFDYEQF
RDLKLLVTASDSGNPPLSSNVSLNLFVLDQNDNAPEILYPALPTDGSTGVELAPRSAEPGYLVTKVVAVDRDSGQ
NAWLSYRLLKASEPGLFSVGLHTGEVRTARALLDRDALKQSLVVAVQDHGQPPLSATVTLTVAVADRIPDILADL
GSLEPSAKPNDSDLTLYLVVAVAAVSCVFLAFVIVLLALRLRRWHKSRLLQASGGGLASTPGSHFVGADGVRAFL
QTYSHEVSLTADSRKSHLIFPQPNYADTLISQESCEKSEPLLITQDLLEMKGDSNLLQQAPPNTDWRFSQAQRPG
TSGSQNGDDTGTWPNNQFDTEMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHVPDYRQNVYIPGS
NATLTNAAGKRDGKAPAGGNGNKKKSGKKEKK

PCT/US2003/028547

1887/6881 FIGURE 1744A

ATCAGGGCCGAACAGATTCTCTACTCGGTGTTTGAGGAGCAGGAAGAAGGCTCAGTGGTGGGCAACATCGCCAAG GACCTGGGGTTGGCGCCCCGGGAGCTGGCGGAGCCCGGAGTCCGCATCGTCTCCAGAGGTAGGACGCAGCTTTTC GCCCTGAACCCGCGCAGCGGCACCTTGGTCACCGCGGGTAGGATAGACAGGGAGGAGCTCTGCGACAGATCTCCA AACTGTGTGACAAACCTGGAGATTCTTCTAGAAGATACAGTGAAGATTTTGCGGGTAGAGGTGGAAATAATCGAT GTTAATGATAACCCACCCAGTTTTGGGACAGAACAGAGGGAAATAAAAGTTGCTGAAAATGAAAATCCTGGGGCA AGATTTCCTCTTCCTGAAGCTTTTGATCCGGATGTAGGTGTAAACTCCCTGCAGGGTTACCAGCTCAACTCAAAC GGTTACTTTTCCCTGGACGTGCAAAGTGGGGCCGATGGGATTAAGTACCCAGAGCTGGTGCTGGAACGCGCTCTA GATCGCGAGGAAGAGGCGGTTCACCACCTCGTTCTCACGGCCTTCGATGGAGGTGACCCGGTTCGCTCTGGCACT GCCAGGATTCTCATAATACTTGTGGATACCAACGATAATGCTCCCGTGTTCACTCAGCCCGAGTACCACGTAAGT GTTCGTGAGAACGTTCCTGTAGGCACTCGGCTACTCACCGTAAAAGCCACTGATCCAGATGAAGGAGCCAATGGA GACGTGACGTATTCTTTCCGGAAAGTAAGAGACAAAATATCACAGCTATTTCAGTTGAATTCTCTGAGTGGGGAT ATAACAATATTGGGGGGTCTAGATTATGAGGACTCTGGATTCTATGACATAGATGTAGAAGCCCATGATGGGCCT GGTCTCCGAGCTAGAAGCAAGGTACTGGTGACAGTTCTGGATGAAAATGACAACGCACCAGAAGTCACAGTTACA TCTCTCACCAGCTCAGTCCAGGAATCTTCTTCCCCGGGTACAGTAATTGCACTTTTCAACGTGCATGACAGTGAC TCAGGAGGAAATGGCCTAGTCACATGTTCTATTCCAGATAATCTGCCATTCACACTTGAAAAGACCTATGGAAAT TATTATCGGTTGTTGACACACAGAACACTGGACAGGGAAGAAGTCTCAGAATATAACATCACTGTAACTGCCACT ACTTTCCCTCATGCTTCCTACTCTGCTTACATTCCTGAAAACAACCCCAGAGGAGCCTCCATCTTATCTATGACT GCTCAAGACCCTGACAGTGGTGACAATGCCCGAATCACTTACTCCCTGGCCGAAGACACCTTCCAGGGTGCACCT CTGTCCTCCTATGTCTCCATCAACTCCAATACAGGGATCCTATATGCTCTTTGCTCCTTCGACTATGAGCAGTTT AGAGACCTGCAGCTGATGACAGCCAGTGACAGTGGAGACCCTCCACTCAGCAGCAATGTGTCACTGAGCCTC TTTGTGCTGGACCAGACGACAATGTCCCTGAGATCCTGTACCCCACCTTCCCTACTGATGGCTCCACTGGTGTG GAGCTGGCACCCCGCTCCGCAGATTCCGGCTACCTGGTGACCAAAGTGGTGGCAGTGGACAGAGACTCAGGTCAG AATGCCTGGCTGTCCTACAGCCTACTCAAGTCCAGCGAGCCGGGACTATTTGCAGTGGGGCTGCACACAGGCGAG GTGCGCACCGCACGGGCCCTGCTGGACAGAGACGCGCTCAAGCAGAGGCTTGTAGTGGTCGTCCAGGACCATGGC CAGCCCCCTCTCTCGGCCACCGTCACACTCACTGTGGCTGTGGCCGACAGCATCCCAGATGTCCTGGCTGACTTG GGCAGCCTCAAGCCTTCAGCAGACCCAGACGACTCGGGCCTCACACTCTATCTCGTGGTGGCAGTGGCCGCTGTC TCCTGCGTCTTCCTGGCTTTTGTCACGGTGCTGCTAGCACTCAAGCTGAGACGCTGGCACAAGTCACGCCTGCTT CACGCTGAAGGCAGCAGGTTGGCAGGTGTGCCTGCCTCGCACTTTGTGGGCGTGGACGGGGTTCGGGCTTTCCTG CAGACCTATTCCCACGAGGTCTCCCTCACCGCGGACTCGCGGAAGAGTCACCTGATCTTCTCCCAACCCAGCTAT GCAGACACGCTCATCAGCCGGGAGAGTTGTGAGAAAAGCGAGCCTCTTCTGATAACTCAGGATTTACTTGAAACA AAAGGAGACCCTAATCTTCAGCAAGCCCCGCCCAACACGGACTGGCGTTTCTCTCAGGCCCAGAGACCCGGCACC AGCGGCTCCCAAAATGGCGATGACACCGGCACCTGGCCCAACAACCAGTTTGACACAGAGATGCTGCAAGCCATG ATCTTGGCGTCCGCCAGTGAAGCTGCTGATGGGAGCTCCACCCTGGGAGGGGGTGCCGGCACCATGGGATTGAGC GCCCGCTACGGACCCCAGTTCACCCTGCAGCACGTGCCCGACTACCGCCAGAATGTCTACATCCCAGGCAGCAAT GCCACACTGACCAACGCAGCTGGCAAGCGGGATGGCAAGGCCCCAGCAGGTGGCAATGGCAACAAGAAGAAGTCG GGCAAGAAGGAGAAGAAG<mark>TAA</mark>CATGGAGGCCAGGCCAAGAGCCACAGGGCGGCCTCTCCCCAACCAGCCCAGCTT CTCCTTACCTGCACCCAGGCCTCAGAGTTTCAGGGCTAACCCCCAGAATACTGGTAGGGGCCCAAGGCCATGCTCC CCTTGGGAAACAGAACAAGTGCCCAGTCAGCACCTACCCCTTCCCCCCAGGGGGTTGAATATGCAAAAGCAGT TCCGCTGGGAACCCCCATCCAATCAACTGCTGTACCCATGGGGGTAGTGGGGTTACTGTAGACACCAAGAACCAT CTCCTCCCCACCCCACTCCAACAGTTCCTCTTTCCCGAGTAAGGTGGTTGGGGTGTTGAAGTACCAAGTAACCTA CAAGCCTCCTAGTTCTGAAAAGTTGGAAGGGCATCATGACCTCTTGGCCTCTCCTTTGATTCTCAATCTTCCCCC AAAGCATGGTTTGGTGCCAGCCCCTTCACCTCCTTCCAGAGCCCAAGATCAATGCTCAAGTTTTGGAGGACATGA GGGGACCAGTCTTCTGTTTTGTTTTCATTGTTTGACGTTTCCACTGCATGCCTTGACTTCCCCCACCTCCTCCT

PCT/US2003/028547

FIGURE 1744B

PCT/US2003/028547

1889/6881 FIGURE 1745

MAAPPARPDHTRLLQICLLLGVLVEIRAEQILYSVFEEQEEGSVVGNIAKDLGLAPRELAERGVRIVSRGRTQLF
ALNPRSGTLVTAGRIDREELCDRSPNCVTNLEILLEDTVKILRVEVEIIDVNDNPPSFGTEQREIKVAENENPGA
RFPLPEAFDPDVGVNSLQGYQLNSNGYFSLDVQSGADGIKYPELVLERALDREEEAVHHLVLTAFDGGDPVRSGT
ARILIILVDTNDNAPVFTQPEYHVSVRENVPVGTRLLTVKATDPDEGANGDVTYSFRKVRDKISQLFQLNSLSGD
ITILGGLDYEDSGFYDIDVEAHDGPGLRARSKVLVTVLDENDNAPEVTVTSLTSSVQESSSPGTVIALFNVHDSD
SGGNGLVTCSIPDNLPFTLEKTYGNYYRLLTHRTLDREEVSEYNITVTATDQGTPPLSTETHISLQVMDINDNPP
TFPHASYSAYIPENNPRGASILSMTAQDPDSGDNARITYSLAEDTFQGAPLSSYVSINSNTGILYALCSFDYEQF
RDLQLLMTASDSGDPPLSSNVSLSLFVLDQNDNVPEILYPTFPTDGSTGVELAPRSADSGYLVTKVVAVDRDSGQ
NAWLSYSLLKSSEPGLFAVGLHTGEVRTARALLDRDALKQRLVVVVQDHGQPPLSATVTLTVAVADSIPDVLADL
GSLKPSADPDDSGLTLYLVVAVAAVSCVFLAFVTVLLALKLRRWHKSRLLHAEGSRLAGVPASHFVGVDGVRAFL
QTYSHEVSLTADSRKSHLIFSQPSYADTLISRESCEKSEPLLITQDLLETKGDPNLQQAPPNTDWRFSQAQRPGT
SGSQNGDDTGTWPNNQFDTEMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHVPDYRQNVYIPGSN
ATLTNAAGKRDGKAPAGGNGNKKKSGKKEKK

PCT/US2003/028547

1890/6881 FIGURE 1746A

ATGCCGAGTCCACCTAGGGGCTGGGGGCTGCGGAGAGCTGCTGCCGCTTCATGCTCCTGGGGACGCTGTGCGAG CCAGGATCCGGGCAGATCCGCTACTCGATGCCGGAGGAGCTGGACAAAGGCTCCTTCGTCGGCAACATAGCCAAG GACCTTGGGCTGGAGCCCCAGGAGCTGGCGGAGCGCGGAGTCCGCATCGTCTCCAGAGGTAGGACGCAGCTTTTT GCCCTGAACCCGCGAAGCGGCAGCTTGGTCACCGCGGGCAGGATAGACCGGGAGGAGCTCTGCGCTCAGAGCCCA CTGTGTGTGGTGAACTTTAACATCTTGGTTGAGAACAAAATGAAAATTTATGGAGTAGAAGTAGAAATAATCGAT ATTAATGATAACTTCCCGCGTTTCCGGGATGAAGAGTTAAAAGTTAATGAAAATGCGGCTGCAGGGACA CGGTTAGTGCTTCCCTTCGCGCGGGATGCGGATGTGGGTGTGAACTCTCTCCGGAGTTACCAGCTCAGCTCCAAT CTGCACTTCTCTCTGGATGTGGTAAGCGGAACTGATGGACAAAAGTATCCGGAGCTGGTGTTGGAACAGCCCCTA GACCGCGAGAAAGAGACTGTTCACGACCTCCTCACAGCTTTAGATGGCGGAGACCCGGTACTCTCCGGCACC ACGCACATCCGTGTTACGGTCCTCGACGCAAACGACAATGCGCCCCTGTTCACCCCATCCGAGTACAGCGTGAGT GTTCCAGAGAACATACCTGTGGGCACTCGGCTGCTCATGCTAACCGCCACGGATCCAGATGAGGGAATAAACGGG AAATTGACCTACTCTTTTCGCAATGAAGAAGAAAAAATTTCGGAGACTTTCCAACTTGATTCCAACCTGGGGGGAA ATCTCAACTCTACAATCACTGGACTATGAAGAATCCAGATTCTACCTCATGGAAGTGGTAGCTCAGGATGGAGGC GCTCTTGTTGCCAGCGCTAAGGTGGTCACAGTACAGGACGTGAATGACAATGCCCCCGAAGTGATCCTCACC TCTCTGACCAGTTCGATCTCTGAAGACTGTCTTCCCGGAACTGTAATCGCGCTGTTTAGCGTACATGATGGTGAT TCTGGAGAAAATGGTGAGATTGCATGCTCTATTCCTAGGAATTTGCCTTTTAAATTGGAGAAGTCAGTTGATAAT AATTTCCCTCAAGCCTCCTACTCCACCTCTGTCACAGAAAACAATCCCAGAGGTGTCTCTATCTTCTGTGACA GCCCATGACCCCGACAGCGGCGACAACGCTCGAGTCACCTACTCCCTGGCTGAAGACACATTTCAGGGGGCGCCC TTGTCCTCCTATGTATCCATTAACTCTGACACCGGTGTCCTGTATGCTCTGAGATCCTTCGACTATGAGCAGTTG AGAGACCTACAGTTGTGGGTGACAGCCAGCGACAGTGGGAACCCTCCACTTAGCAGCAACGTGTCGCTGAGCCTG TTTGTGCTGGACCAGAACGACAATACGCCTGAGATCCTGTACCCCGCCCTCCCCACAGACGGTTCCACGGGCGTG GAGCTGGCCCCTCGCTCCGCAGAACCTGGCTACCTGGTGACCAAGGTGGTAGCGGTGGACAAAGATTCAGGCCAG AACGCCTGGCTGTCCTACCGCCTGCTTAAGGCCAGCGAGCCAGGACTCTTTGCGGTTGGGCTGCACACGGGCGAG GTGCGCACAGCGCGAGCCCTGCTGGACAGAGACGCGCTCAAGCAGAGCCTCGTGGTGGCCGTCGAAGACCATGGC CAGCCCCTCTGTCAGCCACCTTCACGGTCACCGTTGCCGTGGCCGACAGGATCCCTGACATCCTGGCTGACCTA GGCAGTATCAAGACCCCCATTGACCCTGAGGATCTGGACCTCACACTCTATCTTGTGGTGGCAGTGGCTGCAGTC TCCTGCGTCTTCCTGGCCTTCGTCATCGTGCTGCTGGTGCTCAGACTGAGGCGCTGGCACAAGTCACGCCTGCTT CAGGCTGAAGGCAGCAGGTTGGCGGGTGTGCCCGCCTCGCACTTTGTGGGCGTGGATGGGGTTCGGGCTTTCCTG CAGACCTATTCCCACGAGGTCTCCCTCACCGCGGACTCGAGGAAGAGTCACCTGATCTTTCCCCAGCCCAACTAC GCAGACACGCTCCTTAGTGAAGAGAGCTGTGAGAAAAGCGAGCCTCTTCTGATGTCTGATAAGGTAGATGCAAAC AAAGAAGAACGGCGAGTTCAGCAAGCCCCGCCCAACACGGACTGGCGTTTCTCTCAGGCCCAGAGACCCGGCACC AGCGGCTCCCAAAATGGCGATGACACCGGCACCTGGCCCAACAACCAGTTTGACACAGAGATGCTGCAAGCCATG ATCTTGGCGTCCGCCAGTGAAGCTGCTGATGGGAGCTCCACCCTGGGAGGGGGTGCCGGCACCATGGGATTGAGC GCCCGCTACGGACCCCAGTTCACCCTGCAGCACGTGCCCGACTACCGCCAGAATGTCTACATCCCAGGCAGCAAT GCCACACTGACCAACGCAGCTGGCAAGCGGGATGGCAAGGCCCCAGCAGGTGGCAATGGCAACAAGAAGAAGTCG GGCAAGAAGGAGAAGAAGTAACATGGAGGCCAGGCCAAGAGCCACAGGGCGGCCTCTCCCCAACCAGCCCAGCTT CTCCTTACCTGCACCCAGGCCTCAGAGTTTCAGGGCTAACCCCCAGAATACTGGTAGGGGCCAAGGCCATGCTCC CCTTGGGAAACAGAACAAGTGCCCAGTCAGCACCTACCCCTTCCCCCCAGGGGGTTGAATATGCAAAAGCAGT TCCGCTGGGAACCCCCATCCAATCAACTGCTGTACCCATGGGGGTAGTGGGGTTACTGTAGACACCAAGAACCAT CTCCTCCCCACCCCACTCCAACAGTTCCTCTTTCCCGAGTAAGGTGGTTGGGGTGTTGAAGTACCAAGTAACCTA CAAGCCTCCTAGTTCTGAAAAGTTGGAAGGGCATCATGACCTCTTGGCCTCTCTTTGATTCTCAATCTTCCCCC AAAGCATGGTTTGGTGCCAGCCCCTTCACCTCCTTCCAGAGCCCAAGATCAATGCTCAAGTTTTGGAGGACATGA GGGGACCAGTCTTCTGTTTTGTTTTCATTGTTTGACGTTTCCACTGCATGCCTTGACTTCCCCCACCTCCTCCT

PCT/US2003/028547

1891/6881 FIGURE 1746B

PCT/US2003/028547

1892/6881 FIGURE 1747

MASPPRGWGCGELLLPFMLLGTLCEPGSGQIRYSMPEELDKGSFVGNIAKDLGLEPQELAERGVRIVSRGRTQLF
ALNPRSGSLVTAGRIDREELCAQSPLCVVNFNILVENKMKIYGVEVEIIDINDNFPRFRDEELKVKVNENAAAGT
RLVLPFARDADVGVNSLRSYQLSSNLHFSLDVVSGTDGQKYPELVLEQPLDREKETVHDLLLTALDGGDPVLSGT
THIRVTVLDANDNAPLFTPSEYSVSVPENIPVGTRLLMLTATDPDEGINGKLTYSFRNEEEKISETFQLDSNLGE
ISTLQSLDYEESRFYLMEVVAQDGGALVASAKVVVTVQDVNDNAPEVILTSLTSSISEDCLPGTVIALFSVHDGD
SGENGEIACSIPRNLPFKLEKSVDNYYHLLTTRDLDREETSDYNITLTVMDHGTPPLSTESHIPLKVADVNDNPP
NFPQASYSTSVTENNPRGVSIFSVTAHDPDSGDNARVTYSLAEDTFQGAPLSSYVSINSDTGVLYALRSFDYEQL
RDLQLWVTASDSGNPPLSSNVSLSLFVLDQNDNTPEILYPALPTDGSTGVELAPRSAEPGYLVTKVVAVDKDSGQ
NAWLSYRLKASEPGLFAVGLHTGEVRTARALLDRDALKQSLVVAVEDHGQPPLSATFTVTVAVADRIPDILADL
GSIKTPIDPEDLDLTLYLVVAVAAVSCVFLAFVIVLLVLRLRRWHKSRLLQAEGSRLAGVPASHFVGVDGVRAFL
QTYSHEVSLTADSRKSHLIFPQPNYADTLLSEESCEKSEPLLMSDKVDANKEERRVQQAPPNTDWRFSQAQRPGT
SGSQNGDDTGTWPNNQFDTEMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHVPDYRQNVYIPGSN
ATLTNAAGKRDGKAPAGGNGNKKKSGKKEKK

PCT/US2003/028547

1893/6881 FIGURE 1748A

ATGGCGCCTCCGCAGAGGCATCCGCAGCGCAGCGAGCAGGTCCTGCTCCTCACGCTCCTGGGGACGCTGTGGGGG GCCGCGGCAGCACCACTCTATTCCCGAGGAGCTGGAGAAAGGCTCCTTCGTAGGCAACATCGTCAAG GATCTGGGACTGGAGCCCCAGGAGTTGGCGGAGCACGGAGTCCGCATCGTCTCCAGAGGTAGGATGCAGCTTTTC TCTCTGAATCCGCGAAACGGCAGCTTGGTCACCGCGGGTAGGATAGACCGCGAGGAGCTCTGTGCTCAGAGCCCG CGGTGTCTGGTGAGTTTTAACATCCTTGTCGAGGATAAACTGAATCTTTATCCCGTGGAAGTGGAAATAGTGGAC ATTAATGACAATACACCCGATTCTTAAAGGAAGAATTGGAAGTGAAAATTCTCGAAAACGCAGCTCCATCCTCT CGTTTTCCACTAATGGAGGTCTATGACCCTGATGTGGGAATGAACTCCCTTCAGGGATTTAAGCTCAGTGGTAAT AGTCACTTCTCAGTGGACGTGCAAAGCGAAGCCCATGGGCCCAAGTACCCGGAGCTGGTGCTGGAGGGCACACTG GCCCAAATTCTGGTAACAGTTCTAGATGTGAATGACACACCTCCAATGTTTACTCAGCCTGTCTACCGTGTAAGT GTTCCTGAAAACCTGCCAGTAGGCACACCAGTGTTGGCAGTGACTGCCACCGACCAGGATGAAGGAGTCCACGGG GAAGTAACTTATTCCTTTGTGAAGATTACAGAAAAGATCTCACAAATTTTCTGTTTGAATGTTTTGACTGGAGAA ATTTCAACTTCTGCAAATCTAGACTATGAGGACTCGAGTTTTTATGAGCTGGGTGTTGAAGCCCGGGATGGGCCA GGTCTTCGAGACAGAGCGAAAGTCTTAATAACTATCTTGGATGTCAATGATAATGTACCAGAAGTGGTTGTTACA TCTGGCCTGAATGGCCTGGTAACCTGTTCCATCCCGAGAAGTCTCCCATTTGAATTGGAAAAATCAGTTGGCAAT TATTATCGATTAGTGACAAATGCAGCTCTAGACCGGGAAGAGGTATTCTTGTACAACATCACTGTGACAGCCACG GACAAAGGAACACCACCTCTGTCTACAGAAACAATCATCTCTCTAAATGTGGCAGACACCAACGACAACCCGCCC ACCTTCCCCCATTCATCCTACTCAGTCTATGTCCTTGAAAACAACCCCAGGGGTGCCTCCATCTTCTCTGTGAAT GCACTGGACCCTGACGTGGACCAGAACGCCCAAGTCTCCTACTCACTGGCAGAAGACACCCTCCAGGGGGCGCCC CTGTCCTCCTACGTGTCCATCAACTCCGACACTGGGATTCTGTACGCCCTGCGCTCCTTCGACTATGAGCAGTTG AGAGACCTACAGCTGTGGGTGACAGCCAGCGACAGCGGGGACCCGCCTCTTAGCAGCAACGTGTCACTGAGCCTG TTTGTGCTGGACCAGAATGACAATGCGCCCGAGATCCTGTACCCCGCCCTCCCCACAGACGGTTCCACTGGCGTG GAGCTGGCGCCCCGCTCCGCAGAGCCCGGCTACCTGGTGACCAAGGTGGTGGCGGTGGACAGAGACTCGGGCCAG AACGCCTGGCTGTCCTACCGCCTGCTCAAGGCCAGCGAGCCAGGACTTTTCTCAGTGGGCCTGCACACGGGCGAG GTGCGCACGGCGCGCCCTGCTGGACAGAGACGCGCTCAAGCAGAGCCTAGTGGTGGCCGTCCAGGACCACGGC CAGCCCCTCTCTCCGCCACTGTCACGCTCACCGTGGCCGTGGCCGACAGGATCCCCGACATCCTGGCCGACCTG GGCAGCCTCGAGCCCTCCGCCAAACCCAACGATTCGGACCTCACTCTGTACCTGGTGGTGGCGGTGGCCGCGGTC TCCTGCGTCTTCCTGGCCTTCGTCATCGTGCTGCTGCTGCTCAGACTGCAGCGCTGGCACAAGTCACGCCTGCTG CAGGCTTCGGGAGGTGGCTTAGCGAGCATGCCCGGCTCGCACTTTGTGGGCGTGGAAGGGGTTCGGGCTTTCCTG CAGACCTATTCCCACGAGGTCTCACTCACTGCAGACTCGCGTAAGAGTCATCTGATTTTCCCCCAGCCCAACTAT GCCGACACGCTTATCAACCAGGAGAGCTATGAGAAAAGCGAGCCTCTTCTGATAACTCAGGATTTACTTGAAAACG AAAGGAGAACCCAGGCAACTTCAGCAAGCCCCGCCCAACACGGACTGGCGTTTCTCTCAGGCCCAGAGACCCGGC ACCAGCGGCTCCCAAAATGGCGATGACACCGGCACCTGGCCCAACAACCAGTTTGACACAGAGATGCTGCAAGCC ATGATCTTGGCGTCCGCCAGTGAAGCTGCTGATGGGAGCTCCACCCTGGGAGGGGGTGCCGGCACCATGGGATTG AGCGCCCGCTACGGACCCCAGTTCACCCTGCAGCACGTGCCCGACTACCGCCAGAATGTCTACATCCCAGGCAGC AATGCCACACTGACCAACGCAGCTGGCAAGCGGGATGGCAAGGCCCCAGCAGGTGGCAATGGCAACAAGAAGAAG CTTCTCCTTACCTGCACCCAGGCCTCAGAGTTTCAGGGCTAACCCCCAGAATACTGGTAGGGGCCAAGGCCATGC TCCCCTTGGGAAACAGAACAAGTGCCCAGTCAGCACCTACCCCTTCCCCCCAGGGGGTTGAATATGCAAAAGC AGTTCCGCTGGGAACCCCCATCCAATCAACTGCTGTACCCATGGGGGTAGTGGGGTTACTGTAGACACCAAGAAC TCCCTCCTCCCACCCCACTCCAACAGTTCCTCTTTCCCGAGTAAGGTGGTTGGGGTGTTGAAGTACCAAGTAAC $\verb|CTACAAGCCTCCTAGTTCTGAAAAGTTGGAAGGGCATCATGACCTCTTGGCCTCTCCTTTGATTCTCAATCTTCC| \\$ CCCAAAGCATGGTTTGGTGCCAGCCCCTTCACCTCCTTCCAGAGCCCAAGATCAATGCTCAAGTTTTGGAGGACA CCTGGGGACCAGTCTTCTGTTTTGTTTTTCATTGTTTGACGTTTCCACTGCATGCCTTGACTTCCCCCACCTCCT

PCT/US2003/028547

1894/6881 FIGURE 1748B

PCT/US2003/028547

FIGURE 1749

MAPPQRHPQRSEQVLLLTLIGTLWGAAAAQIRYSIPEELEKGSFVGNIVKDLGLEPQELAEHGVRIVSRGRMQLF
SLNPRNGSLVTAGRIDREELCAQSPRCLVSFNILVEDKLNLYPVEVEIVDINDNTPRFLKEELEVKILENAAPSS
RFPLMEVYDPDVGMNSLQGFKLSGNSHFSVDVQSEAHGPKYPELVLEGTLDREGEAVYRLVLTAMDGGDPVRSSV
AQILVTVLDVNDNTPMFTQPVYRVSVPENLPVGTPVLAVTATDQDEGVHGEVTYSFVKITEKISQIFCLNVLTGE
ISTSANLDYEDSSFYELGVEARDGPGLRDRAKVLITILDVNDNVPEVVVTSGSRTIAESAPPGTVIALFQVFDRD
SGLNGLVTCSIPRSLPFELEKSVGNYYRLVTNAALDREEVFLYNITVTATDKGTPPLSTETIISLNVADTNDNPP
TFPHSSYSVYVLENNPRGASIFSVNALDPDVDQNAQVSYSLAEDTLQGAPLSSYVSINSDTGILYALRSFDYEQL
RDLQLWVTASDSGDPPLSSNVSLSLFVLDQNDNAPEILYPALPTDGSTGVELAPRSAEPGYLVTKVVAVDRDSGQ
NAWLSYRLKASEPGLFSVGLHTGEVRTARALLDRDALKQSLVVAVQDHGQPPLSATVTLTVAVADRIPDILADL
GSLEPSAKPNDSDLTLYLVVAVAAVSCVFLAFVIVLLALRLQRWHKSRLLQASGGGLASMPGSHFVGVEGVRAFL
QTYSHEVSLTADSRKSHLIFPQPNYADTLINQESYEKSEPLLITQDLLETKGEPRQLQQAPPNTDWRFSQAQRPG
TSGSQNGDDTGTWPNNQFDTEMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHVPDYRQNVYIPGS
NATLTNAAGKRDGKAPAGGNGNKKKSGKKEKK

PCT/US2003/028547

1896/6881 FIGURE 1750A

ATCGCGGCTCAGCCGAGGGGGGGGGACTACAGAGGATTCTTCCTGCTCTCCATCCTCCTGGGGACCCCCTGGGAA GCCTGGGCAGGACGTATTCTCTACTCCGTGTCGGAGGAGACGGACAAAGGGTCCTTTGTGGGAGACATCGCCAAG GACCTGGGGCTGGAGCCCCGGGAGCTGGCGGAGCGCGGAGTCCGCATCATCTCCAGAGGTAGGACGCAGCTTTTC GCCCTGAACCAGCGCAGCGCAGCTTGGTCACTGCGGGCAGGATAGACCGGGAAGAGATCTGCGCTCAGAGTGCG CGGTGTCTGGTAAACTTTAACATCCTGATGGAAGATAAAATGAATCTTTACCCTATAGACGTGGAAATAATAGAT CGCCACTTCTCCCTGGCTGTGCAAAGTGGAGACGATGAAACTAAGTACCCGGAACTGGTGCTGGAGCGGGTGCTG GACCGGGAGGAAGAGCGGGTTCACCACCTGGTCCTCACAGCCTCTGATGGCGGCGACCCGCCCCGATCCAGCACC GCCCACATCCAGGTGACAGTGGTGGATGTGAATGACCACACGCCTGTCTTCTCTCTGCCTCAGTACCAAGTAACT GTCCCCGAGAATGTGCCAGTGGGTACAAGACTGCTCACGGTACATGCTATCGACCTGGACGAGGGAGTCAATGGG GAAGTGACATATTCTTTTCGGAAAATAACTCCTAAACTTCCAAAGATGTTTCATCTGAACTCGCTTACAGGAGAA ATATCAACTTTAGAAGGATTAGATTATGAAGAAACTGCCTTCTATGAAATGGAGGTTCAGGCTCAAGATGGTCCT GGTAGTCTGACAAAGGCAAAAGTACTGATCACAGTTTTAGATGTAAATGATAATGCTCCAGAAGTGACTATGACG TATTATAGATTGGTCACAACCAAAAACTTGGACCGGGAAACACTCTCTTTGTATAACATCACACTGAAAGCCACA ACCTTCCCCCACTCATCCTACTCAGTCTACATCGCTGAGAACAACCCCAGAGGGGCCTCCATTTTCTTAGTGACT GCACAGGACCACGACAGTGAGGATAATGCCCAGATCACTTATTCCTTGGCCGAAGACACCATCCAGGGGGCTCCA GTGTCCTCCTATGTCTCCATAAACTCTGACACTGGAGTCCTGTACGCGCTGCAATCCTTTGATTATGAGCAGTTG AGAGAACTACAACTAAGAGTGACTGCACATGACAGCGGGGACCCGCCTCTCAGCAGCAACATGTCACTGAGCCTG TTCGTGCTGGACCAGAATGACAACCCGCCCGAGATCCTGTACCCGGCCCTCCCCACAGATGGTTCTACTGGCATG GAGCTGGCACCCCGCTCCGCAGAGCCCGGCTACCTGGTGACCAAGGTGGTGGCGGTGGACAAAGATTCAGGCCAG AACGCCTGGCTGTCATACCTCCTGCTTAAGGCCAGCGAGCCAGGACTCTTTGCGGTTGGGCTGTACACGGGCGAG GTGCGCACGGCTCGGGCCCTGCTGGACAGAGATGCCCTCAAGCAGAGCCTCGTGGTGGCCGTCCAGGACCACGGT CAGCCTCCTCTGTCAGCCACCGTCACCCCTCACCGTGGCTGTGGCTGACAGCATCCCCGAAGTCTTGGCCGACCTG GGCAGCCTTGAGCCCTCCGACGGTCCTTACAACTATGACCTCACGTTGTACCTGGTGGTGGCGGTGGCCACAGTC TCCTGCGTCTTCCTAGCCTTCGTCCTCGTACTGCTGGCGCTCAGGCTGCGGCGCTGGCACAAGTCACGCCTGCTG CAGGCTTCAGAAGGTGGCTTGGCGAACGTGCCCACCTCGCACTTTGTGGGCATGGACGGGGTGCAGGCTTTCCTG CAGACCTATTCCCATGAGGTCTCCCTCACCGCGGACTCTCGGAAGAGTCACCTGATCTTCCCCCAGCCCAACTAT GTAGACATGCTCATCAGCCAGGAGAGCTGTGAGAAAAATGATTCTTTGCTAACATCCGTAGATTTTCAGGAATGT AAAGAAAACCTGCCAAGTATTCAGCAAGCCCCGCCCAACACGGACTGGCGTTTCTCTCAGGCCCAGAGACCCGGC ACCAGCGGCTCCCAAAATGGCGATGACACCGGCACCTGGCCCAACAACCAGTTTGACACAGAGATGCTGCAAGCC ATGATCTTGGCGTCCGCCAGTGAAGCTGCTGATGGGAGCTCCACCCTGGGAGGGGGTGCCGGCACCATGGGATTG AGCGCCCGCTACGGACCCCAGTTCACCCTGCAGCACGTGCCCGACTACCGCCAGAATGTCTACATCCCAGGCAGC CTTCTCCTTACCTGCACCCAGGCCTCAGAGTTTCAGGGCTAACCCCCAGAATACTGGTAGGGGCCAAGGCCATGC TCCCCTTGGGAAACAGAAACAGTGCCCAGTCAGCACCTACCCCTTCCCCCCAGGGGGTTGAATATGCAAAAGC AGTTCCGCTGGGAACCCCCATCCAATCAACTGCTGTACCCATGGGGGTAGTGGGGTTACTGTAGACACCAAGAAC TCCCTCCTCCCCACCCCACTCCAACAGTTCCTCTTTCCCGAGTAAGGTGGTTGGGGTGTTGAAGTACCAAGTAAC CTACAAGCCTCCTAGTTCTGAAAAGTTGGAAGGGCATCATGACCTCTTGGCCTCTCCTTTGATTCTCAATCTTCC CCCAAAGCATGGTTTGGTGCCAGCCCCTTCACCTCCTTCCAGAGCCCAAGATCAATGCTCAAGTTTTGGAGGACA CCTGGGGACCAGTCTTCTGTTTTGTTTTCATTGTTTGACGTTTCCACTGCATGCCTTGACTTCCCCCACCTCCT

PCT/US2003/028547

1897/6881 FIGURE 1750B

PCT/US2003/028547

1898/6881 FIGURE 1751

MAAQPRGGDYRGFFLLSILLGTPWEAWAGRILYSVSEETDKGSFVGDIAKDLGLEPRELAERGVRIISRGRTQLF
ALNQRSGSLVTAGRIDREEICAQSARCLVNFNILMEDKMNLYPIDVEIIDINDNVPRFLTEEINVKIMENTAPGV
RFPLSEAGDPDVGTNSLQSYQLSPNRHFSLAVQSGDDETKYPELVLERVLDREEERVHHLVLTASDGGDPPRSST
AHIQVTVVDVNDHTPVFSLPQYQVTVPENVPVGTRLLTVHAIDLDEGVNGEVTYSFRKITPKLPKMFHLNSLTGE
ISTLEGLDYEETAFYEMEVQAQDGPGSLTKAKVLITVLDVNDNAPEVTMTSLSSSIPEDTPLGTVIALFYLQDRD
SGKNGEVTCTIPENLPFKLEKSIDNYYRLVTTKNLDRETLSLYNITLKATDGGTPPLSRETHIFMQVADTNDNPP
TFPHSSYSVYIAENNPRGASIFLVTAQDHDSEDNAQITYSLAEDTIQGAPVSSYVSINSDTGVLYALQSFDYEQL
RELQLRVTAHDSGDPPLSSNMSLSLFVLDQNDNPPEILYPALPTDGSTGMELAPRSAEPGYLVTKVVAVDKDSGQ
NAWLSYLLLKASEPGLFAVGLYTGEVRTARALLDRDALKQSLVVAVQDHGQPPLSATVTLTVAVADSIPEVLADL
GSLEPSDGPYNYDLTLYLVVAVATVSCVFLAFVLVLLALRRWHKSRLLQASEGGLANVPTSHFVGMDGVQAFL
QTYSHEVSLTADSRKSHLIFPQPNYVDMLISQESCEKNDSLLTSVDFQECKENLPSIQQAPPNTDWRFSQAQRPG
TSGSQNGDDTGTWPNNQFDTEMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHVPDYRQNVYIPGS
NATLTNAAGKRDGKAPAGGNGNKKKSGKKEKK

PCT/US2003/028547

1899/6881 FIGURE 1752A

GCCAGGGCCAGTCAGATTCGCTACTCAGTGCCTGAAGAGACAGAAAAGGGCTATATTGTGGGCAACATCTCCAAG GACCTGGCTCTGGAGCCCCGGGAGCTGGCGGAGCGCCGAGTCCGCATCGTCTCTAGAGGTAGGACGCAGCTTTTC TCTCTGAACCCGCGCAGCGGCACCTTGGTCACCGCGGGTAGGATAGACCGGGGAGGAGCTCTGTGCTCAGAGCCCG CGGTGTCTGGTGAACTTTAAAGTCCTGGTTGAAGACAGAGTGAAACTGTACGGAATAGAAATAGAAGTAACTGAT ATTAACGACAGCGCCCCAAAGTTCCAGGCCGAAAGTCTGGAAGTAAAAATTAACGAAATCGCGGTTCCTGGAGCA CACCACTTCTCCCTGAACGTGCAGACTGGAGACAATGGAGCCATAAACCCAGAGCTGGTGCTGGAGCGCCCCTG GACAGGGAGGAGGCAACTGCCCACCACCTGGTCCTCACGGCCTCGGATGGCGGCGAGCCGCGTCGCTCCAGCACA GTGCGCATCCATGTGACAGTGTTGGATACAAATGATAATGCCCCGGTTTTTGCTCAACGGATTTACCGAGTTAAA AAAGTGGCATACAAATTCTGGAAAATTAATGAAAAACAATCTCTGCTATTCCAGCTTAATGAAAATACTGGGGAA ATATCAACAGCAAAAAGTCTAGATTATGAAGAATGTTCATTTTATGAAATGGAAATACAAGCTGAAGATGGTGGG GGATTGAAAGGGTGGACAAAAGTGCTCATTTCGGTGGAAGATGTAAATGACAATAGACCTGAAGTGACCATTACA TCTCTGTTTAGCCCAGTGAGAGAGACGCACCTCAGGGAACAGTAATTCTTCTTTTCAATGCTCATGACCGAGAC TATTACAGATTGTTGACGGCCCAAATTCTTGACCGAGAAAAAGCCTCAGAATATAATATCACGGTGACTGCAACA GCTTTCTCTCAAGCCTCCTACTCAGTCTACCTCCCGGAAAACAACGCCAGAGGTACTTCCATCTTCTCCGTGATT GCCTATGACCCTGATAGCAATGAGAATTCTAGAGTTATTTACTCCTTGGCAGAGGATACCATCCAAGGGTCTCCT AGAGATTTGCAAATGCAGGTGACGGCAAGTGACAGTGGAAGCCCACCACTTAGCAGCAATGTGTCATTGAGACTG TTTGTTTTGGACCAGAATGACAATGCCCCAGAAATCCTGTACCCTGCCCTCCCCACTGATGGTTCTACTGGTGTG GAGCTGGCACCCCGCTCTGCAGAGCCTGGCTACCTGGTGACCAAGGTGGTGGCAGTGGACAGAGACTCAGGCCAG AATGCTTGGCTCTCCTACCGCCTATTCAAGGCCAGTGAGCCAGGGCTCTTCTCGGTGGGGCTGCACACAGGTGAA GTGCGCACAGCTCGGGCCCTGCTAGATAGAGATGCGCTCAAACAGAGCCTTGTGGTGGCTGTACAGGACCATGGC CAGCCCCTCTCTCGGCCACTGTCACGCTCACAGTAGCCATAGCTGACAGCATCCCAGACATCCTGGCTGACCTG GGCAGTCTTCAGATCCCTGCAGACCTGGAGGCCTCAGACCTTACCCTCGTTGTGGCTGTGGCAGTCGTC TCCTGTGTCTTCCTCACCTTCGTTATCACGCTGCTGGCCCTCAGGCTGAGGCACTGGCACTCCTCGCATCTGCTG CGGGCTACCAGTGATGGGTTGGCTGGTGTGCCCACCTCACACTTTGTGGGTGTAGATGGGGTTCGAGCTTTCCTA CAGACCTATTCTCAGGAGTTCTCCCTCACCGCTGACTCAAGGAAGAGTCACCTGATCTTCCCCCAGCCCAACTAT GCAGACACACTCATCAGCCAGCAGAGCTGTGAGAAAAATGAGCCTTTGTGCGTCTCTGTTGATTCCAAGTTTCCT ATAGAAGACACCCTTTGGTTCCGCAAGCCCCGCCCAACACGGACTGGCGTTTCTCTCAGGCCCAGAGACCCGGC ACCAGCGGCTCCCAAAATGGCGATGACACCGGCACCTGGCCCAACAACCAGTTTGACACAGAGATGCTGCAAGCC ATGATCTTGGCGTCCGCCAGTGAAGCTGCTGATGGGAGCTCCACCCTGGGAGGGGGTGCCGGCACCATGGGATTG AGCGCCCGCTACGGACCCCAGTTCACCCTGCAGCACGTGCCCGACTACCGCCAGAATGTCTACATCCCAGGCAGC AATGCCACACTGACCAACGCAGCTGGCAAGCGGGATGGCAAGGCCCCAGCAGGTGGCAATGGCAACAAGAAGAAG CTTCTCCTTACCTGCACCCAGGCCTCAGAGTTTCAGGGCTAACCCCCAGAATACTGGTAGGGGCCAAGGCCATGC TCCCCTTGGGAAACAGAAACAGTGCCCAGTCAGCACCTACCCCTTCCCCCCAGGGGGTTGAATATGCAAAAGC AGTTCCGCTGGGAACCCCCATCCAATCAACTGCTGTACCCATGGGGGTAGTGGGGTTACTGTAGACACCAAGAAC TCCCTCCTCCCCACCCCACTCCAACAGTTCCTCTTTCCCGAGTAAGGTGGTTGGGGTGTTGAAGTACCAAGTAAC CTACAAGCCTCCTAGTTCTGAAAAGTTGGAAGGGCATCATGACCTCTTGGCCTCTCCTTTGATTCTCAATCTTCC CCCAAAGCATGGTTTGGTGCCAGCCCCTTCACCTCCTTCCAGAGCCCAAGATCAATGCTCAAGTTTTGGAGGACA CCTGGGGACCAGTCTTCTGTTTTGTTTTCATTGTTTGACGTTTCCACTGCATGCCTTGACTTCCCCCACCTCCT

PCT/US2003/028547

FIGURE 1752B

PCT/US2003/028547

1901/6881 FIGURE 1753

MAAPTKCQLRGRLVLLCSLLGMLWEARASQIRYSVPEETEKGYIVGNISKDLALEPRELAERRVRIVSRGRTQLF
SLNPRSGTLVTAGRIDREELCAQSPRCLVNFKVLVEDRVKLYGIEIEVTDINDSAPKFQAESLEVKINEIAVPGA
RYPLPEAIDPDVGVNSLQSYQLSPNHHFSLNVQTGDNGAINPELVLERALDREEATAHHLVLTASDGGEPRRSST
VRIHVTVLDTNDNAPVFAQRIYRVKVLENVPPGTWLLTATASDLDEGINGKVAYKFWKINEKQSLLFQLNENTGE
ISTAKSLDYEECSFYEMEIQAEDGGGLKGWTKVLISVEDVNDNRPEVTITSLFSPVREDAPQGTVILLFNAHDRD
SGKNGQVVCSIQENLSFTLENSEEDYYRLLTAQILDREKASEYNITVTATDRGTPPLSTEIHITLQVTDINDNPP
AFSQASYSVYLPENNARGTSIFSVIAYDPDSNENSRVIYSLAEDTIQGSPLSTYVSINSDTGVLYALCSFDYEQF
RDLQMQVTASDSGSPPLSSNVSLRLFVLDQNDNAPEILYPALPTDGSTGVELAPRSAEPGYLVTKVVAVDRDSGQ
NAWLSYRLFKASEPGLFSVGLHTGEVRTARALLDRDALKQSLVVAVQDHGQPPLSATVTLTVAIADSIPDILADL
GSLQIPADLEASDLTLYLVVAVAVVSCVFLTFVITLLALRLHWHSSHLLRATSDGLAGVPTSHFVGVDGVRAFL
QTYSQEFSLTADSRKSHLIFPQPNYADTLISQQSCEKNEPLCVSVDSKFPIEDTPLVPQAPPNTDWRFSQAQRPG
TSGSQNGDDTGTWPNNQFDTEMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHVPDYRQNVYIPGS
NATLTNAAGKRDGKAPAGGNGNKKKSGKKEKK

WO 2004/030615 PCT/US2003/028547

1902/6881 FIGURE 1754A

ATGCAGAGAGCCAGAGAAGCCGAAATGATGAAAAGTCAGGTACTGTTTCCCTTCCTGCTGTCTTTGTTCTGCGGG GCCATCTCCCAGCAGATCCGATACACGATTCCAGAGGAGCTAGCCAACGGCTCACGGGTGGGGAAACTTGCCAAG GATCTGGGGCTCAGTGTCCGGGAGTTGCCAACTCGAAAACTGCGGGTTAGTGCAGAGGATTATTTCAACGTTAGT CTAGAATTCGAAACGGTCGCTGAAAACCCAATGAATGTTTTCCACGTGGTTGTTGTAATCCAAGATATTAATGAC AATGCACCACGTTTCGTTGCAAAAGGCATTGACTTAGAAATTTGTGAGTCAGCCTTACCCGGGGTAAAATTCTCT TCTCTGTCAACGAAGGAAAGTCCTGATGGAAGTAAATATCCGGTATTACTGCTGGAAAAACCTCTAGACAGGGAA TGGATCCGAGTTACGGATGCCAATGATAATGCTCCCGTGTTTAGCCAGGAGGTATACAGGGTTAGCCTCCAAGAA AACGTACCGTGGGGAACCTCCGTGCTGCGGGTGATGGCCACAGACCAGGATGAGGGCATTAATGCAGAGATCACC TATGCCTTCCTCAATTCCCCAATAAGTACCAGCCTCTTCAATCTCAATCCAAATACTGGCGACATCACAACCAAT GGCACATTGGATTTTGAAGAGACAAGTAGATATGTGTTGAGTGTGGAAGCTAAGGATGGAGGAGTACACACAGCT CACTGTAATGTTCAAATAGAAATTGTTGACGAGAATGACAATGCCCCAGAGGTGACATTCATGTCCTTCTCTAAC CAGATTCCAGAGGATTCAGACCTTGGAACTGTAATAGCCCTCATAAAAGTGCGAGACAAGGATTCTGGGCAAAAT GGCATGGTGACATGCTATACTCAGGAAGAAGTTCCTTTCAAATTAGAATCCACCTCGAAGAATTATTACAAGCTG GTGATTGCTGGAGCCCTAAACCGGGAGCAGACAGCAGACTACAACGTCACAATCATAGCCACCGACAAGGGCAAA CCAGCCCTTTCCTCCAGGACAAGCATCACCCTGCACATCTCCGACATCAACGACAATGCACCTGTTTTCCATCAG GCCTCCTATGTGGTCCACGTGTCTGAGAACAACCCACCTGGCGCCTCCATTGCACAAGTAAGCGCCTCCGACCCG GATTTGGGACCCAACGGCAGAGTCTCCTACTCTATTCTGGCCAGTGACCTGGAGCCGCGGGAGCTGTTGTCCTAC GTGTCCGTGAGCCCGCAGAGCGGGGTGTTCGCGCAGCGCGCCTTCGACCACGAGCAGCTGCGCGCCTTCGAG CTCACACTGCAGGCCAGGGACCAGGGCTCCCCCGCGCTCAGCGCCAACGTGAGCCTGCGCGTGTTGGTGGGCGAC CTCAATGACAATGCGCCACGGGTGCTGTACCCCGCGCTGGGGCCTGATGGCTCCGCCCTCTTCGATATGGTGCCA CGCGCCGCAGAGCCCGGCTACCTGGTGACCAAGGTGGTGGCGGTGGACGCAGACTCAGGACACAACGCTTGGCTG TCCTACCACGTGCTGCAGGCCAGCGAGCCCGGGCTCTTCAGCCTGGGGTTGCGCACGGGTGAGGTGCGCACAGCG CGTGCCTTGGGCGACAGGGACGCGCCCGCCAGCGCCTGCTGGTCGCTGATGGAGGACAGCCGCCACTC TCCGCCACCGCCACGCTGCACCTAATCTTCGCGGATAGCCTGCAAGAGGTATTGCCAGACCTCAGCGACCGCCCT GAGCCCTCTGACCCCCAGACGGAACTGCAGTTTTACCTGGTTGTGGCCTTGGCCTTGATCTCAGTGCTCTTTCTC CTCGCGGTGATTCTAGCGATCGCCCTGCGCCTGCGACGTTCCTCCAGCCTCGACACTGAGGGCTGCTTTCAAACC GGTCTCTGCTCCAAGTCTGGGCCCGGGGTTCCTCCCAACCACGGGGGGGACTTTGCCCTATTCCTACAATCTA TGTATTGCCTCTCATTCTGCAAAGACAGAGTTTAATTCTCTCAACCTGACACCGGAAATGGCTCCCCCTCAGGAT CTGCTGTGTGATGATCCTTCTATGGTTGTATGTGCCAGTAATGAAGATCACAAAATCGCTTATGACCCTTCTTTG TCTTCGCACCAAGCCCCGCCCAACACGGACTGGCGTTTCTCTCAGGCCCAGAGACCCGGCACCAGCGGCTCCCAA AATGGCGATGACACCGGCACCTGGCCCAACAACCAGTTTGACACAGAGATGCTGCAAGCCATGATCTTGGCGTCC GCCAGTGAAGCTGCTGATGGGAGCTCCACCCTGGGAGGGGGTGCCGGCACCATGGGATTGAGCGCCCGCTACGGA CCCCAGTTCACCCTGCAGCACGTGCCCGACTACCGCCAGAATGTCTACATCCCAGGCAGCAATGCCACACTGACC AACGCAGCTGGCAAGCGGGATGGCAAGGCCCCAGCAGGTGGCAATGGCAACAAGAAGAAGTCGGGCAAGAAGAG AAGAAG<u>TAA</u>CATGGAGGCCAGGCCAAGAGCCACAGGGCGCCTCTCCCCAACCAGCCCAGCTTCTCCTTACCTGC ACCCAGGCCTCAGAGTTTCAGGGCTAACCCCCAGAATACTGGTAGGGGCCAAGGCCATGCTCCCCTTGGGAAACA GAAACAAGTGCCCAGTCAGCACCTACCCCTTCCCCCCAGGGGGTTGAATATGCAAAAGCAGTTCCGCTGGGAAC CCCCATCCAATCAACTGCTGTACCCATGGGGGTAGTGGGGTTACTGTAGACACCAAGAACCATTTGCCACACCCC CCACTCCAACAGTTCCTCTTTCCCGAGTAAGGTGGTTGGGGTGTTGAAGTACCAAGTAACCTACAAGCCTCCTAG TTCTGAAAAGTTGGAAGGGCATCATGACCTCTTGGCCTCTCTTTGATTCTCAATCTTCCCCCAAAGCATGGTTT GGTGCCAGCCCTTCACCTCCTTCCAGAGCCCAAGATCAATGCTCAAGTTTTGGAGGACATGATCACCATCCCCA TGGTACTGATGCTTGCTGGATTTAGGGAGGGCATTTTGCTACCAAGCCTCTTCCCAACGCCCTGGGGACCAGTCT TCTGTTTTGTTTTCATTGTTTGACGTTTCCACTGCATGCCTTGACTTCCCCCACCTCCTCCAAACAAGAGAC

PCT/US2003/028547

1903/6881 FIGURE 1754B

PCT/US2003/028547

1904/6881 FIGURE 1755

MQRAREAEMMKSQVLFPFLLSLFCGAISQQIRYTIPEELANGSRVGKLAKDLGLSVRELPTRKLRVSAEDYFNVS
LESGDLLVNGRIDREKICGRKLECALEFETVAENPMNVFHVVVVIQDINDNAPRFVAKGIDLEICESALPGVKFS
LDSAQDADVEGNSLKLYTINPNQYFSLSTKESPDGSKYPVLLLEKPLDREHQSSHRLILTAMDGGDPPLSGTTHI
WIRVTDANDNAPVFSQEVYRVSLQENVPWGTSVLRVMATDQDEGINAEITYAFLNSPISTSLFNLNPNTGDITTN
GTLDFEETSRYVLSVEAKDGGVHTAHCNVQIEIVDENDNAPEVTFMSFSNQIPEDSDLGTVIALIKVRDKDSGQN
GMVTCYTQEEVPFKLESTSKNYYKLVIAGALNREQTADYNVTIIATDKGKPALSSRTSITLHISDINDNAPVFHQ
ASYVVHVSENNPPGASIAQVSASDPDLGPNGRVSYSILASDLEPRELLSYVSVSPQSGVVFAQRAFDHEQLRAFE
LTLQARDQGSPALSANVSLRVLVGDLNDNAPRVLYPALGPDGSALFDMVPRAAEPGYLVTKVVAVDADSGHNAWL
SYHVLQASEPGLFSLGLRTGEVRTARALGDRDAARQRLLVAVRDGGQPPLSATATLHLIFADSLQEVLPDLSDRP
EPSDPQTELQFYLVVALALISVLFLLAVILAIALRLRRSSSLDTEGCFQTGLCSKSGPGVPPNHSEGTLPYSYNL
CIASHSAKTEFNSLNLTPEMAPPQDLLCDDPSMVVCASNEDHKIAYDPSLSSHQAPPNTDWRFSQAQRPGTSGSQ
NGDDTGTWPNNQFDTEMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHVPDYRQNVYIPGSNATLT
NAAGKRDGKAPAGGNGNKKKSGKKEKK

PCT/US2003/028547

1905/6881 FIGURE 1756A

CCCGGGGCTCTCCCAGTCCAGATCCGCTATTCAATTCCAGAGGAGCTGGCCAAAAACTCGGTCGTAGGAAACCTC GCCAAGGATCTGGGGCTCAGCGTCCGGGACTTGCCAGCCCGGAAGCTGCGGGTTAGCGCGGAGAAGGAATATTTC ACAGTAAACCCAGAAAGCGGAGACTTACTTGTGAGTGACAGAATAGACCGAGAACAGATATGCGGGAAGCAGCCT CTGTGTGTTCTGGATTTCGATACTGTCGCTGAAAATCCACTAAATATTTTCTACATAGCAGTAATTGTGCAGGAT ATAAATGATAATACCCCGCTATTCAAACAGACTAAGATTAATTTAAAAATTGGCGAATCCACTAAGCCAGGTACA ACATTTCCACTTGACCCAGCCCTGGATTCAGATGTTGGTCCTAACTCACTACAAGATACCACCTTAATGACAAC GAGTACTTTGATCTCGCTGAGAAACAGACTCCAGATGGTCGTAAATATCCTGAGTTGATTCTAAAACACTCTCTG GACAGAGAGAGCACAGTTTACATCAATTGGTCCTCACAGCTGTGGATGGCGGAGACCCACCTCAAAGTGGCACG ACCCAAATCCGAATCAAAGTCACGGATGCCAACGATAACCCTCCAGTGTTCAGCCAGGACGTGTACAGGGTCACC GAGATCACCTACTCCTTTCATAATGTGGACGAACAAGTGAAACACTTTTTCAACTTAAATGAAAAAAACAGGAGAA **ATCACGACAAAGGATGATTTGGATTTTGAGATTGCAAGTAGTTACACTCTGAGTATCGAAGCAAAAGATCCTGGA** GATCTAGCAGCCCACTGCAGTATCCAAGTTGAAATTCTTGATGACAACGATTGTGCACCTGAAGTTATTGTGACT TCAGTATCTACTCCCCTACCGGAGGATTCGCCACCAGGAACAGTGATCGCCTTGATAAAAACGAGAGACAGAGACA TCTGGAGAAAATGGAGAAGTTTACTGCCAAGTGTTGGGAAATGCCAAGTTTATTTTGAAATCTTCCTCAAAGAAC TATTACAAACTAGTGACAGACGGCGCTCTGGACCGGGAGGAGATCCCAGAATACAATCTCACCATCACAGCCACC GACGGGGGCAAGCCGCCCTCTCCTCCAGCATAATTGTCACCCTGCACATCTCCGACGTCAACGATAATGCCCCA GTTTTCCAACAGACTTCCTACATGGTTCACGTGGCAGAGAACAATCCTCCTGGCGCCCTCTATCGCTCAAATCAGT ATTTTATCCTACGTGTCCGTGAGCGCGCAGAGCGGGGTGGTGTTCGCGCAGCGCCCTTCGATCATGAGCAGCTG CGCGCCTTCGAGCTCACACTGCAGGCCCGCGACCAGGGCTCGCCCGCGCTCAGCGCCAACGTGAGCCTGCGCGTG TTAGTGGGCGACCTCAATGACAATGCGCCACGGGTGCTGTACCCCGCGCTGGGGCCTGATGGCTCCGCCCTCTTC GATATGGTGCCACGCGCCGCAGAGCCCGGCTACCTGGTGACCAAGGTGGTGGCGGTGGACGCAGACTCAGGACAC AACGCTTGGCTGTCCTACCACGTGCTGCAGGCCAGCGAGCCCGGGCTCTTCAGCCTGGGGTTGCGCACGGGTGAG GTGCGCACAGCGCGTGCCTTGGGCGACAGGGACGCGCCGCCCAGCGCCTGCTGGTCGCTGTGCGTGATGGAGGA CAGCCGCCACTCTCCGCTACGGCCACGCTGCACCTAATCTTCGCGGATAGCCTGCAAGAGGTATTGCCAGACCTC AGCGACCGCCGGGAGCCCTCTGACCCCCAGGCAAAACTGCAGTTTTACCTGGTTGTGGCCTTGGCCTTGATCTCA GTGCTCTTCTTCCTCGCGGTGATTCTGGCAATCTCCCTGCGCCTGCGACTCTCTTCCAGGTCAGATGCTTGGGAC TGTTTTCAGCCTGGTCTCAGCCTCCAAGCCTGGACCTGGGGTTCTCCCCAATTACAGTGAGGGTACATTGCCCTAT TCCTACAACCTGTGTGTTGCCTCACAATCAGCCAAGACAGAGTTCAATTTTCTGAACATAACCCCGGAATTGGTT CCCGCGCAAGATCTCGTCTGTGACAATGCCTCTTGGGAACAAAATACAAATCATGGAGCCGCTGGGGTCCCTTTT GCCTCAGATACTATTTTGAAGCAAGCCCCGCCCAACACGGACTGGCGTTTCTCTCAGGCCCAGAGACCCGGCACC AGCGGCTCCCAAAATGGCGATGACACCGGCACCTGGCCCAACAACCAGTTTGACACAGAGATGCTGCAAGCCATG ATCTTGGCGTCCGCCAGTGAAGCTGCTGATGGGAGCTCCACCCTGGGAGGGGGTGCCGGCACCATGGGATTGAGC GCCCGCTACGGACCCCAGTTCACCCTGCAGCACGTGCCCGACTACCGCCAGAATGTCTACATCCCAGGCAGCAAT GCCACACTGACCAACGCAGCTGGCAAGCGGGATGGCAAGGCCCCAGCAGGTGGCAATGGCAACAAGAAGAAGTCG CTCCTTACCTGCACCCAGGCCTCAGAGTTTCAGGGCTAACCCCCAGAATACTGGTAGGGGCCAAGGCCATGCTCC CCTTGGGAAACAGAACAAGTGCCCAGTCAGCACCTACCCCTTCCCCCCAGGGGGTTGAATATGCAAAAGCAGT TCCGCTGGGAACCCCATCCAATCAACTGCTGTACCCATGGGGGTAGTGGGGTTACTGTAGACACCAAGAACCAT CTCCTCCCACCCCACTCCAACAGTTCCTCTTTCCCGAGTAAGGTGGTTGGGGTGTTGAAGTACCAAGTAACCTA CAAGCCTCCTAGTTCTGAAAAGTTGGAAGGGCATCATGACCTCTTGGCCTCTCCTTTGATTCTCAATCTTCCCCC AAAGCATGGTTTGGTGCCAGCCCCTTCACCTCCTCCAGAGCCCAAGATCAATGCTCAAGTTTTGGAGGACATGA GGGGACCAGTCTTCTGTTTTGTTTTTCATTGTTTGACGTTTCCACTGCATGCCTTGACTTCCCCCACCTCCTCCT

PCT/US2003/028547

FIGURE 1756B

PCT/US2003/028547

1907/6881 FIGURE 1757

MKASSGRCGLVRWLQVLLPFLLSLFPGALPVQIRYSIPEELAKNSVVGNLAKDLGLSVRDLPARKLRVSAEKEYF
TVNPESGDLLVSDRIDREQICGKQPLCVLDFDTVAENPLNIFYIAVIVQDINDNTPLFKQTKINLKIGESTKPGT
TFPLDPALDSDVGPNSLQRYHLNDNEYFDLAEKQTPDGRKYPELILKHSLDREEHSLHQLVLTAVDGGDPPQSGT
TQIRIKVTDANDNPPVFSQDVYRVTLREDVPPGFFVLQVTATDRDEGINAEITYSFHNVDEQVKHFFNLNEKTGE
ITTKDDLDFEIASSYTLSIEAKDPGDLAAHCSIQVEILDDNDCAPEVIVTSVSTPLPEDSPPGTVIALIKTRDRD
SGENGEVYCQVLGNAKFILKSSSKNYYKLVTDGALDREEIPEYNLTITATDGGKPPLSSSIIVTLHISDVNDNAP
VFQQTSYMVHVAENNPPGASIAQISASDPDLGPSGQVSYSIVASDLKPREILSYVSVSAQSGVVFAQRAFDHEQL
RAFELTLQARDQGSPALSANVSLRVLVGDLNDNAPRVLYPALGPDGSALFDMVPRAAEPGYLVTKVVAVDADSGH
NAWLSYHVLQASEPGLFSLGLRTGEVRTARALGDRDAARQRLLVAVRDGGQPPLSATATLHLIFADSLQEVLPDL
SDRREPSDPQAKLQFYLVVALALISVLFFLAVILAISLRLRLSSRSDAWDCFQPGLSSKPGPGVLPNYSEGTLPY
SYNLCVASQSAKTEFNFLNITPELVPAQDLVCDNASWEQNTNHGAAGVPFASDTILKQAPPNTDWRFSQAQRPGT
SGSQNGDDTGTWPNNQFDTEMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHVPDYRQNVYIPGSN
ATLTNAAGKRDGKAPAGGNGNKKKSGKKEKK

PCT/US2003/028547

1908/6881 FIGURE 1758A

<u>ATCGGAAATAGCTCCGGATGGAGGGGCCCAGCAGGGCAGAGGCGAATGCTATTTCTCTTCCTGCTCTTTTGTTA</u> GACCAGGTTCTCCGAACCGATCCGCTACGCTATTCCCGAGGAGCTGGACAGGGGCTCGCTGGTAGGGAACCTC GCCAAGGACCTGGGGTTTGGCGTGGGGGATTTACCTACTAGGAACCTGCGGGTTATTGCAGAGAAAATTCTTT ACCGTGAGCCCCGAAAATGGGAACTTACTTGTGAGCGACCGTATAGACCGAGAGGAGATTTGTGGCAAGAAGTCG ACGTGTGTTCTGGAATTTGAAATGGTTGCTGAAAAGCCTTTAAACTTTTTCATGTAACTGTGCTGATCCAGGAT ATTAACGACAACCCACCGACCTTTAGCCAAAATATCACTGAGCTGGAAATCAGCGAACTGGCTCTCACTGGAGCC ACATTTGCCCTGGAATCTGCGCAAGATCCTGATGTAGGTGTCAATTCGCTGCAGCAGTACTACCTCAGCCCTGAT CCGCACTTCTCTTTGATTCAGAAGGAGAACCTGGATGGCAGTAGGTACCCAGAGCTAGTACTGAAAGCACCCCTG GACAGGGAAGAGCAGCCACCTCGCCCTGGTCCTCACAGCTGTGGATGGGGGCGAGCCCTCCAGAAGCTGTACC ACCCAGATCAGGGTAATTGTCGCAGATGCAAATGATAACCCCCCAGTATTTACTCAGGACATGTACAGGGTCAAT GTTGCAGAGAACCTGCCCGCTGGCTCCTCCGTATTAAAAGTGATGGCCATTGACATGGATGAGGGCATCAATGCC GAAATCATCTATGCCTTCATCAATATTGGCAAGGAAGTGAGACAACTGTTCAAGCTGGACAGTAAAACGGGGGAA CTCACCACTATTGGAGAACTGGACTTTGAAGAGAGAGATAGCTACACAATTGGGGTGGAAGCAAAGGATGGTGGA CATCACACTGCATATTGTAAAGTACAGATAGATATTTCAGATGAAAATGACAATGCCCCGGAGATAACCCTGGCT TCTGAATCCCAACATATACAAGAAGATGCTGAGCTGGGGACTGCCGTTGCCCTGATCAAAACACATGATCTAGAT TCTGGATTTAATGGAGAAATCCTATGCCAACTAAAAGGAAACTTCCCCTTTAAAATCGTTCAAGATACCAAAAAC ACATACAGGTTGGTGACAGATGGAGCCCTGGACCGGGAGCAGATCCCAGAATACAATGTGACGATCACAGCTACC GACAAAGGCAATCCACCGCTCTCCTCCAGCAAGACCATCACTCTGCACATCCTTGATGTCAACGACAACGTTCCC GTTTTCCACCAGGCCTCCTACACCGTGCATGTAGCTGAGAACAATCCGCCTGGAGCCTCCATTGCGCATGTCAGA GCCTCGGATCCCGACTTGGGACCTAATGGCCTTGTCTCCTACTACATCGTGGCCAGTGACCTGGAGCCGCGGGAG CTGTCGTCCTACGTGTCCGTGAGCGCGGGGGGGGGGGTGTTCGCCGCAGCGAGCCTTCGACCACGAGCAGCTG CGTGCCTTCGAGCTCACTCTGCAGGCCCGCGACCAGGGCTCGCCTACGCTCAGCGCCAACGTGAGCCTGCGCGTG TTGGTGGACGACCGCAACGACAATGCACCGCTGGTGCTGTACCCAGCTCTGGGGCCCGAAGGCTCTGCGCTCTTC GATATGGTGCCGCGCTCTGCAGAGCCTGGCTACCTGGTGACCAAGGTGGTGGCGGTGGACGCAGACTCGGGATAC AACGCCTGGCTGTCCTACCACATTGTGCAGGCCAGCGAGCCCGGGCTGTTCAGCCTGGGCCTGCGCACGGGTGAG GTGCGCACGGCGCGTACCTTGGGCGACAGGGAGGCCGCCGCCAGCGCCTGCTGGTCACTGTGCGTGATGGAGGA CAGCAGCCTCTTTCAGCCACCGTCATGCTGCACCTAATCTTCGCAGATAGCTTGCAAGAGATACAACCTGACCTT AGCGACCGCCCCACTCCCTCTGACCCTCAGGCGGAGCTACAGTTTCACCTAGTAGTGGCGTTGGCCTTGATCTCA GTGCTCTTCCTCGCGGTGATTCTGGCAATCTCCCTGCGCCTGCGATGCTCCTCCAGACCCGCCACTGAGGGC TACTTTCAGCCTGGTGTCTGCTTCAAGACTGTACCTGGAGTTCTCCCCACCTACAGCGAAAGGACTTTGCCTTAT TCCTACAATCCGTGTGCTGCCTCACATTCCTCAAACACCGAGTTTAAATTTCTCAATATAAAGGCTGAAAATGCT GCACCACAAGATCTTCTATGTGATGAAGCCTCTTGGTTTGAAAGTAATGACAATCCAGAAATGCCTTCTAATTCA GGCAATTTGCAAAAGCAAGCCCCGCCCAACACGGACTGGCGTTTCTCTCAGGCCCAGAGACCCGGCACCAGCGGC TCCCAAAATGGCGATGACACCGGCACCTGGCCCAACAACCAGTTTGACACAGAGATGCTGCAAGCCATGATCTTG GCGTCCGCCAGTGAAGCTGCTGATGGGAGCTCCACCCTGGGAGGGGGTGCCGGCACCATGGGATTGAGCGCCCGC TACGGACCCCAGTTCACCCTGCAGCACGTGCCCGACTACCGCCAGAATGTCTACATCCCAGGCAGCAATGCCACA CTGACCAACGCAGCTGGCAAGCGGGATGGCAAGGCCCCAGCAGGTGGCAATGGCAACAAGAAGAAGTCGGGCAAG AAGGAGAAGAAG<u>TAA</u>CATGGAGGCCAGGCCAAGAGCCACAGGGGGGGCCTCTCCCCAACCAGCCCAGCTTCTCCTT ACCTGCACCCAGGCCTCAGAGTTTCAGGGCTAACCCCCAGAATACTGGTAGGGGCCAAGGCCATGCTCCCCTTGG GAAACAGAAACAAGTGCCCAGTCAGCACCTACCCCTTCCCCCCAGGGGGTTGAATATGCAAAAGCAGTTCCGCT GGGAACCCCCATCCAATCAACTGCTGTACCCATGGGGGTAGTGGGGTTACTGTAGACACCAAGAACCATTTGCCA CCCACCCCACTCCAACAGTTCCTCTTTCCCGAGTAAGGTGGTTGGGGTGTTGAAGTACCAAGTAACCTACAAGCC TCCTAGTTCTGAAAAGTTGGAAGGGCATCATGACCTCTTGGCCTCTCCTTTGATTCTCAATCTTCCCCCAAAGCA TGGTTTGGTGCCAGCCCCTTCACCTCCTTCCAGAGCCCAAGATCAATGCTCAAGTTTTGGAGGACATGATCACCA TCCCCATGGTACTGATGCTTGCTGGATTTAGGGAGGGCATTTTGCTACCAAGCCTCTTCCCAACGCCCTGGGGAC CAGTCTTCTGTTTTGTTTTCATTGTTTGACGTTTCCACTGCATGCCTTGACTTCCCCCACCTCCTCAAACA

PCT/US2003/028547

1909/6881 FIGURE 1758B

PCT/US2003/028547

FIGURE 1759

MGNSSGWRGPAGQRRMLFLFLLSLLDQVLSEPIRYAIPEELDRGSLVGNLAKDLGFGVGDLPTRNLRVIAEKKFF
TVSPENGNLLVSDRIDREEICGKKSTCVLEFEMVAEKPLNFFHVTVLIQDINDNPPTFSQNITELEISELALTGA
TFALESAQDPDVGVNSLQQYYLSPDPHFSLIQKENLDGSRYPELVLKAPLDREEQPHHHLVLTAVDGGEPSRSCT
TQIRVIVADANDNPPVFTQDMYRVNVAENLPAGSSVLKVMAIDMDEGINAEIIYAFINIGKEVRQLFKLDSKTGE
LTTIGELDFEERDSYTIGVEAKDGGHHTAYCKVQIDISDENDNAPEITLASESQHIQEDAELGTAVALIKTHDLD
SGFNGEILCQLKGNFPFKIVQDTKNTYRLVTDGALDREQIPEYNVTITATDKGNPPLSSSKTITLHILDVNDNVP
VFHQASYTVHVAENNPPGASIAHVRASDPDLGPNGLVSYYIVASDLEPRELSSYVSVSARSGVVFAQRAFDHEQL
RAFELTLQARDQGSPTLSANVSLRVLVDDRNDNAPLVLYPALGPEGSALFDMVPRSAEPGYLVTKVVAVDADSGY
NAWLSYHIVQASEPGLFSLGLRTGEVRTARTLGDREAARQRLLVTVRDGGQQPLSATVMLHLIFADSLQEIQPDL
SDRPTPSDPQAELQFHLVVALALISVLFLLAVILAISLRLRCSSRPATEGYFQPGVCFKTVPGVLPTYSERTLPY
SYNPCAASHSSNTEFKFLNIKAENAAPQDLLCDEASWFESNDNPEMPSNSGNLQKQAPPNTDWRFSQAQRPGTSG
SQNGDDTGTWPNNQFDTEMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHVPDYRQNVYIPGSNAT
LTNAAGKRDGKAPAGGNGNKKKSGKKEKK

WO 2004/030615 PCT/US2003/028547

1911/6881 FIGURE 1760A

ATGGGGAGCGGCGCGGGAGCTGGGCCGGGCTGAGAGGCTGCCAGTGCTCTTTCTCTCCTGCTGTCTTTGTTC TGCCCGGCGCTCTGTGAGCAGATCCGCTACAGGATTCCCGAGGAAATGCCCAAGGGCTCCGTAGTGGGGAACCTC GCCACGGACCTGGGGTTCAGCGTCCAGGAGTTACCGACTCGAAAACTGCGCGTCAGTTCGGAGAAGCCTTACTTC ACCGTGAGCGCAGAGAGCGGGGAGTTGCTTGTGAGCAGCAGGCTAGACAGGGAGGAGATATGCGGGAAGAAGCCA GCTTGTGCTCTGGAATTTGAGGCTGTTGCTGAAAATCCACTGAACTTTTATCACGTGAATTGTGGAGATCGAGGAC ATTAATGACCACACGCCAAAATTCACGCAAAATTCCTTTGAGCTGCAAATAAGTGAGTCTGCACAGCCTGGCACA CCAAGTTTCTCATTAATAATTAAGGAGAAACAGGATGGTAGTAAATACCCGGAACTGGCACTGGAGAAAACCTTA GACCGGGAACAACAGAGTTACCATCGTTTAGTCCTGACTGCCTTGGACGGTGGACATCCACCCCTAAGCGGCACC ACTGAGCTCCGGATCCAGGTAACCGACGCCAATGATAATCCCCCGGTATTCAACCGAGACGTGTACAGAGTCAGC CTTCGGGAAAACGTGCCACCAGGCACCACTGTGTTGCAAGTGTCAGCCACTGACCAAGACGAGGGCATCAACTCA GAAATTACTTATTCCTTCTACAGAACCGGGCAAATCTTTAGTCTGAATTCAAAGAGCGGAGAAATTACCACTCAA CAATGTACAGTTGAAATTAATATTCAAGATGAAAATGACAATAGCCCAGAAGTTACATTCCATTCTACTTGAA ATGATTCTGGAAAACGCGGTGCCTGGAACACTAATTGCTTTGATCAAAATACATGACCAAGATTCTGGGGAAAAT GGGGAGGTTAATTGTCAATTACAAGGCGAAGTCCCTTTTAAGATTATCTCTTCATCCAAAAATTCGTATAAGTTG CCGCCCTCTCCTCCAGCATAAGCGTCATCCTACATATCAGAGACGTCAACGATAACGCTCCGGTTTTCCACCAG GCGTCCTACTTAGTCAGTGTACCCGAAAACAACCCTCCTGGGGCCTCCATCGCGCAAGTCTGCGCCTCGGACCTG GACTTGGGGTTGAACGGCCAAGTCTCCTACTCTATCATGGCCAGCGACCTAGAGCCTCTGGCACTGGCCTCTTAC GTGTCCATGAGCGCGCAAAGTGGGGTGTTTCGCGCAGCGCGCCTTTGACTACGAGCAGCTGCGCACCTTCGAA CTCACACTACAGGCCCGCGACCAGGGCTCGCCTGCGCTCAGCGCAAACGTGAGCCTGCGCGTGTTGGTGGGCGAC CGAAACGACACGCGCGGGTGCTGTACCCCGCGCTGGGTCCCGACGCTCTTCGATATGGTGCCG CGCGCTGCAGAGCCCGGCTACCTGGTGACCAAGGTAGTGGCCGTGGACGCAGACTCAGGACACACGCCTGGCTG TCCTACCACGTGCTGCAGGCTAGCGAGCCCGGGCTCTTCAGCCTGGGGCTGCGCACAGGAGAGGTGCGCACAGCG CGTGCCTTGGGCGACAGGGACGCGCCCGCCAGCGCCTGCTGGTTGCTGTGCGTGATGGTGGACAGCCGCCACTC ${\tt TCCGCCACCGCCACGCTGCACTTGGTCTTTGCTGACAGCTTGCAGGAGGTGCTGCCGGATATCACTGACCGCCCT}$ GTACCCTCTGACCCCCAGGCTGAGCTGCAGTTTTACCTAGTGGTGGCCTTGGCCTTGATCTCAGTGCTCTTCCTC CTGGCCGTGATTCTGGCCGTTGCCTTGCGCCTGCGACGCTCCTCCAGCCCTGCCGCCTGGAGCTGCTTCCAACCT GGTCTCTGTGTCAAGTCTGGACCTGTGGTTCCCCCCAACTACAGTCAGGGGACTTTGCCTTATTCCTACAACCTA TGTGTTGCACATACAGGAAAGACGGAGTTTAATTTCCTAAAATGTAGTGAGCAATTGAGTTCAGGACAAGACATA CTTTGTGGTGATTCATCTGGGGCCTTATTTCCACTTTGTAATTCCAGCGAGTCGACTTCCCATCCTGAGTTGCAA GCCCGCCCAACACGGACTGGCGTTTCTCTCAGGCCCAGAGACCCGGCACCAGCGGCTCCCAAAATGGCGATGAC ACCGGCACCTGGCCCAACAACCAGTTTGACACAGAGTGCTGCAAGCCATGATCTTGGCGTCCGCCAGTGAAGCT GCTGATGGGAGCTCCACCCTGGGAGGGGGTGCCGGCACCATGGGATTGAGCGCCCGCTACGGACCCCAGTTCACC CTGCAGCACGTGCCCGACTACCGCCAGAATGTCTACATCCCAGGCAGCAATGCCACACTGACCAACGCAGCTGGC AAGCGGGATGGCAAGGCCCCAGCAGGTGGCAATGGCAACAAGAAGAAGTCGGGCAAGAAGGAGAAGAAGTAACAT GGAGGCCAGGCCAAGAGCCACAGGGCGGCCTCTCCCCAACCAGCCCAGCTTCTCCTTACCTGCACCCAGGCCTCA GAGTTTCAGGGCTAACCCCCAGAATACTGGTAGGGGCCAAGGCCATGCTCCCCTTGGGAAACAGAAACAAGTGCC CAGTCAGCACCTACCCCTTCCCCCCAGGGGGTTGAATATGCAAAAGCAGTTCCGCTGGGAACCCCCATCCAATC AACTGCTGTACCCATGGGGGTAGTGGGGTTACTGTAGACACCAAGAACCATTTGCCACACCCCGTTTAGTTACAG TTCCTCTTTCCCGAGTAAGGTGGTTGGGGTGTTGAAGTACCAAGTAACCTACAAGCCTCCTAGTTCTGAAAAGTT GGAAGGGCATCATGACCTCTTGGCCTCTCTTTGATTCTCAATCTTCCCCCAAAGCATGGTTTGGTGCCAGCCCC TTCACCTCCTTCCAGAGCCCAAGATCAATGCTCAAGTTTTGGAGGACATGATCACCATCCCCATGGTACTGATGC TTGCTGGATTTAGGGAGGGCATTTTGCTACCAAGCCTCTTCCCAACGCCCTGGGGACCAGTCTTCTGTTTTGTTT TTCATTGTTTGACGTTTCCACTGCATGCCTTGACTTCCCCCACCTCCTCAAACAAGAGACTCCACTGCATGT

PCT/US2003/028547

1912/6881 FIGURE 1760B

PCT/US2003/028547

1913/6881 FIGURE 1761

MGSGAGELGRAERLPVLFLFLLSLFCPALCEQIRYRIPEEMPKGSVVGNLATDLGFSVQELPTRKLRVSSEKPYF
TVSAESGELLVSSRLDREEICGKKPACALEFEAVAENPLNFYHVNVEIEDINDHTPKFTQNSFELQISESAQPGT
RFILEVAEDADIGLNSLQKYKLSLNPSFSLIIKEKQDGSKYPELALEKTLDREQQSYHRLVLTALDGGHPPLSGT
TELRIQVTDANDNPPVFNRDVYRVSLRENVPPGTTVLQVSATDQDEGINSEITYSFYRTGQIFSLNSKSGEITTQ
KKLDFEETKEYSMVVEGRDGGGLVAQCTVEINIQDENDNSPEVTFHSLLEMILENAVPGTLIALIKIHDQDSGEN
GEVNCQLQGEVPFKIISSSKNSYKLVTDGTLDREQTPEYNVTITATDRGKPPLSSSISVILHIRDVNDNAPVFHQ
ASYLVSVPENNPPGASIAQVCASDLDLGLNGQVSYSIMASDLEPLALASYVSMSAQSGVVFAQRAFDYEQLRTFE
LTLQARDQGSPALSANVSLRVLVGDRNDNAPRVLYPALGPDGSALFDMVPRAAEPGYLVTKVVAVDADSGHNAWL
SYHVLQASEPGLFSLGLRTGEVRTARALGDRDAARQRLLVAVRDGGQPPLSATATLHLVFADSLQEVLPDITDRP
VPSDPQAELQFYLVVALALISVLFLLAVILAVALRRSSSPAAWSCFQPGLCVKSGPVVPPNYSQGTLPYSYNL
CVAHTGKTEFNFLKCSEQLSSGQDILCGDSSGALFPLCNSSESTSHPELQAPPNTDWRFSQAQRPGTSGSQNGDD
TGTWPNNQFDTEMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHVPDYRQNVYIPGSNATLTNAAG
KRDGKAPAGGNGNKKKSGKKEKK

PCT/US2003/028547

1914/6881 FIGURE 1762A

ATGGGAGGGAGCTGCGCGCAGAGGCGCCGGGCCCGGGCAGGTGCTATTTCCTTTGCTGCTGCCTTTGTTC TACCCCACCCTGAGTGAGCCGATCCGCTACTCGATTCCGGAGGAGCTGGCCAAGGGCTCGGTGGTGGGGAACCTC GCTAAGGATCTAGGGCTCAGTGTCCTGGATGTGTCGGCTCGCAAGCTGCGAGTGAGCGCGGAGAAGCTGCACTTC AGCGTAGACGCGGAGAGCGGGGACTTACTTGTGAAGAACCGAATAGACCGTGAGCAAATATGCAAAGAGAGAAGA AGATGTGAGTTGCAATTGGAAGCTGTGGTGGAAAATCCTTTAAATATTTTTCATGTCATTGTGGTGATTGAGGAT GTTAATGACCACGCCCCTCAATTTGATAAAAAGGAAATACATTTAGAAATTTTCGAATCTGCATCCGCTGGTACA CGACTATCGCTTGACCCTGCCACGGATCCTGATATAAACATAAACTCAATTAAAGATTATAAGATAAACTCTAAT CCTTATTTTCATTAATGGTTAGAGTTAATTCCGATGGTGGCAAATACCCAGAGTTATCTCTGGAGAAACTCCTA GACCGGGAAGAACAGAGATCTCATAGCTTGATATTGACTGCCTTGGACGGAGGGGACCCACCAAGAAGTGCCACC GCTCACATAGAAATTTCTGTCAAGGATACCAATGATAACCCCCCGGTTTTCAGCAGAGACGAATATAGAATTAGT CTTAGTGAAAATCTGCCCCCTGGGTCCCCTGTGTTGCAAGTGACAGCCACTGACCAGGATGAGGGGGTCAATGCT GAGATAAACTACTACTTCCGAAGCACTGCCCAGAGCACAAAACATATGTTCTCATTGGATGAGAAAACAGGTATG ATTAAGAATAACCAGTCATTTGATTTTGAAGATGTAGAAAGGTACACCATGGAAGTGGAAGCGAAGGACGGAGGT GGTCTCTCTACCCAGTGTAAAGTAATCATAGAAATCCTTGATGAAAACGACAACAGCCCAGAAATAATCATCACT TCTCTCTCTGATCAGATTTTGGAGAATTCACCTCCAGGAATGGTTGTTGCCCTCTTCAAAACACGGGATCTGGAT TACTACAAACTGGTGACAGATGGAGCCCTGGACCGAGAGCAGACACCAGAATACAATGTCACCATCGTAGCCACT GACAGGGGCAAGCCGCCTCTTTCTTCCAGTAGAAGCATCACCTTGTATGTCGCTGACATCAACGACAACGCCCCA GTTTTCGACCAGACGTCCTACGTGGTCCACGTGGCCGAGAACAACCCGCCAGGAGCCTCCATTGCGCAAGTGAGC GCCTCTGACCCGGATTTGGGGCTCAATGGCCACATCTCCTACTCTATAGTGGCGAGTGACCTAGAGCCCCTGGCG GTGTCGTCATACGTGTCAGTGAGCGCGCAGAGCGGGGTGGTGTTCGCCGCAGCGCCCTTTGATCACGAGCAGCTG CGCGCCTTCGCGCTCACGCTGCAGGCCCGCGACCACGGCTCGCCCCACGCTCAGCGCCAACGTGAGCCTGCGCGTG TTGGTGGGAGACCGCAATGACAACGCACCGCGGTGCTGTACCCAGCTCTGGGTCCTGACGGCTCCGCGTTCTTC GATATGGTACCTCGCTCTGCAGAGCCCGGCTACCTAGTGACTAAGGTGGTAGCGGTGGACGCCGACTCGGGACAC AACGCCTGGCTGTCCTACCACGTGCTGCAGGCCAGTGAGCCCGGACTCTTCAGCCTGGGGCTGCGCACTGGGGAG GTGCGCACGGCTCGAGCCTTAGGCGACAGGGACGCAGCCCCAGCGCCTGCTGGTCGCTGTGCGTGACGGTGGA CAGCCGCCACTCTCTGCCACCGCCACGCTTCATCTGGTCTTCGCAGACAACTTGCAAGAGATACTGCCAGACCTC AGCGACCGCCCTGTACTCTCTGACCCCCAGGCTGAACTGCAGTTTTACCTGGTGGTGGCCTTGGCCTTAATCTCA GTGCTCTTCCTCCTCGCCGTGATTCTGGCCATTGCCTTGCGCCTGCGACGCTCTCTCAGCCCTGCTACTTGGGAC TGCTTCCATCCTGTCTCTGTGTCAAGTCTGGACCTGTAGTTCCCCCCAACTACAGTGAGGGGACTTTGCCTTAT TCTTATAATCTGTGCATTGCACATACGGGTACAAAAGAGTTTAATTTCCTAAAATGCAGTGTGCCCCTACATTCC AATGAAGACATGGTTTGCAGTGTTTCTCCTGGAGCCTTAATTCCACCTCATGGTGGGGAGGATTTGACTTCACAT CCTGAGACTCTGACT1CGCAAGCCCCGCCCAACACGGACTGGCGTTTCTCTCAGGCCCAGAGACCCGGCACCAGC GGCTCCCAAAATGGCGATGACACCGGCACCTGGCCCAACAACCAGTTTGACACAGAGATGCTGCAAGCCATGATC TTGGCGTCCGCCAGTGAAGCTGCTGATGGGAGCTCCACCCTGGGAGGGGGTGCCGGCACCATGGGATTGAGCGCC CGCTACGGACCCCAGTTCACCCTGCAGCACGTGCCCGACTACCGCCAGAATGTCTACATCCCAGGCAGCAATGCC ACACTGACCAACGCAGCTGGCAAGCGGGATGGCAAGGCCCCAGCAGGTGGCAATGGCAACAAGAAGAAGTCGGGC ${\tt AAGAAGGAGAAGAAG} {\color{red}{\textbf{TAA}}} {\tt CATGGAGGCCAGGCCAAGAGCCACAGGGCGGCCTCTCCCCAACCAGCCCAGCTTCTC}$ CTTACCTGCACCCAGGCCTCAGAGTTTCAGGGCTAACCCCCAGAATACTGGTAGGGGCCAAGGCCATGCTCCCCT TGGGAAACAGAACAAGTGCCCAGTCAGCACCTACCCCTTCCCCCCAGGGGGTTGAATATGCAAAAGCAGTTCC GCTGGGAACCCCATCCAATCAACTGCTGTACCCATGGGGGTAGTGGGGTTACTGTAGACACCAAGAACCATTTG CTCCCCACCCCACTCCAACAGTTCCTCTTTCCCGAGTAAGGTGGTTGGGGTGTTGAAGTACCAAGTAACCTACAA GCCTCCTAGTTCTGAAAAGTTGGAAGGGCATCATGACCTCTTGGCCTCTCCTTTGATTCTCAATCTTCCCCCAAA GCATGGTTTGGTGCCAGCCCCTTCACCTCCTTCCAGAGCCCAAGATCAATGCTCAAGTTTTGGAGGACATGATCA GACCAGTCTTCTGTTTTGTTTTCATTGTTTGACGTTTCCACTGCATGCCTTGACTTCCCCCCACCTCCTCCTCAA

PCT/US2003/028547

1915/6881 FIGURE 1762B

PCT/US2003/028547

1916/6881 FIGURE 1763

MGGSCAQRRRAGPRQVLFPLLPLFYPTLSEPIRYSIPEELAKGSVVGNLAKDLGLSVLDVSARKLRVSAEKLHF
SVDAESGDLLVKNRIDREQICKERRRCELQLEAVVENPLNIFHVIVVIEDVNDHAPQFDKKEIHLEIFESASAGT
RLSLDPATDPDININSIKDYKINSNPYFSLMVRVNSDGGKYPELSLEKLLDREEQRSHSLILTALDGGDPPRSAT
AHIEISVKDTNDNPPVFSRDEYRISLSENLPPGSPVLQVTATDQDEGVNAEINYYFRSTAQSTKHMFSLDEKTGM
IKNNQSFDFEDVERYTMEVEAKDGGGLSTQCKVIIEILDENDNSPEIIITSLSDQILENSPPGMVVALFKTRDLD
FGGNGEVRCNIETDIPFKIYSSSNNYYKLVTDGALDREQTPEYNVTIVATDRGKPPLSSSRSITLYVADINDNAP
VFDQTSYVVHVAENNPPGASIAQVSASDPDLGLNGHISYSIVASDLEPLAVSSYVSVSAQSGVVFAQRAFDHEQL
RAFALTLQARDHGSPTLSANVSLRVLVGDRNDNAPRVLYPALGPDGSAFFDMVPRSAEPGYLVTKVVAVDADSGH
NAWLSYHVLQASEPGLFSLGLRTGEVRTARALGDRDAARQRLLVAVRDGGQPPLSATATLHLVFADNLQEILPDL
SDRPVLSDPQAELQFYLVVALALISVLFLLAVILAIALRLRRSLSPATWDCFHPGLCVKSGPVVPPNYSEGTLPY
SYNLCIAHTGTKEFNFLKCSVPLHSNEDMVCSVSPGALIPPHGGEDLTSHPETLTSQAPPNTDWRFSQAQRPGTS
GSQNGDDTGTWPNNQFDTEMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHVPDYRQNVYIPGSNA
TLTNAAGKRDGKAPAGGNGNKKKSGKKEKK

PCT/US2003/028547

1917/6881 FIGURE 1764A

GCTGCGCAGACCTTGCCCAGCACCAGATTGCCAGCTCCGAGACCCGGGACTCCTCCTGTCCTGGGCCGAATGC AGGGAGCTGCGCGCAGAGGCCCCGGGCCGGCCGGCAGGTACTATTTCCTTTGCTGCCTTTGTTCTACCC CACGCTGTGTGAGCCGATCCGCTACTCGATTCCGGAGGAGCTGGCCAAGGGCTCGGTGGTGGGGAACCTCGCTAA GGATCTAGGGCTTAGTGTCCTGGATGTGTCGGCTCGCGAGCTGCGAGTGAGCGCGGAGAAGCTGCACTTCAGCGT AGACGCGCAGAGCGGGGACTTACTTGTGAAGGACCGAATAGACCGTGAGCAAATATGCAAAGAGAGAAGAAGATG TGAGTTGCAATTGGAAGCTGTGGTGGAAAATCCTTTAAATATTTTTCATGTCATTGTGGTGATTGAGGATGTTAA TGACCACGCCCTCAATTCCGGAAAGATGAAATAAACTTAGAAATCAGTGAATCCGTCAGCCTGGGGATGGGAAC AATTCTTGAGTCTGCAGAAGATCCTGATATTAGTATGAATTCGCTGAGCAAATACCAACTAAGTCCTAACGAGTA TTTCTCATTGGTGGAGAAAGACAATCCTGATGGTGGCAAATATCCAGAATTAGTATTGCAGAAGACTCTGGACCG AGAAACGCAGAGCGCTCACCACTTGGTACTGACCGCCTTAGATGGTGGGGACCCTCCCGGAAGCGGTACTGCTCA GATAAGAATCCTGGTAATAGATGCCAATGACAACCCCCCAGTGTTCAGCCAGGACGTGTACAGGGTTAGCCTTCG GGAAGACGTGCCTCCAGGCACCTCCATCCTGAGAGTGAAGGCCACTGACCAGGACGAGGGCATCAACTCAGAGAT CACTTATTCCTTCTTTGGTGTGGCTGACAAAGCTCAGCACGTGTTCTCTCTGGATTACACTACAGGAAACATTCT AACTCAGCAGCCTTTGGATTTTGAAGAAGTAGAAAGATATACGATAAACATAGAAGCAAAAAGACCGAGGATCTCT CTCAACACGGTGTAAAGTAATTGTAGAAGTTGTAGACGAAAACGACAACAGCCCAGAAATAATCATCACGTCACT CTCTGATCAGATTATGGAGGATTCCCCTCCAGGAGTGGTTGTTGCCCTCTTCAAAACACGGGACCAAGACTCAGG GGGCAAGCCTCCGTTATCCTCCAGCAAAACCATAACCCTGCACATTACTGACGTCAATGACAACGCGCCGGTTTT CGGACAGTCAGCCTACCTGGTCCACGTGCCAGAAAACAACCAGCCGGGTGCCTCCATAGCGCAAGTCAGTGCCTC TGACCCAGACTTCGGGCTCAACGGCCGTGTCTCCTACTCTCTCATTGCCAGCGACCTGGAGTCACGAACGCTGTC GTCCTACGTGTCCGTGAGCGCGCAGAGCGGGGTGGTGTTCGCGCAGCGCGCCCTTCGACCACGAGCAGCTGCGCAC CTTCGAGCTCACGCTGCAGGCCCGCGACCAGGGCTCGCCCGCGCTCAGCGCCAATGTGAGCCTGCGCGTGTTGGT GGGCGACCGTAACGACAACGCACCGCGGGTGCTGTACCCTGCGCTGGGTCCCGACGGCTCCGCGCTCTTCGACAC AGTGCCGCGGGCCGCAGCCAGGCTACCTGGTGACCAAGGTGGTGGCCGTGGACGCGGACTCGGGGCACAATGC CTGGCTGTCCTACCACGTGGTGCAGGCCAGTGAGCCCGGGCTCTTCAGCCTGGGGCTGCGAACAGGCGAGGTGCG CATGGTGCGTGCTTTGGGTGACAAGGACTCGGTCCGCCAGCGCCTGCTAGTCGCTGTAAGAGATGGAGGACAGCC ACCCCTTTCAGCCACTGCCACGCTGCACCTGGTGTTCGCAGATAGCTTGCAAGAGGTACTGCCGGATTTCAGCGA CCATCCCACACCCTCTGACTCCCAGGCTGAGATGCAGTTTTACCTGGTGGTGGCCTTGGCCTTGATTTCTGTGCT CTTTCTCCTCGCGGTGATTCTAGCTATTGCTCTACGCCTGCGACAGTCTTTCAGCCCTACTGCAGGAGACTGCTT TGAGTCAGTTCTCTGCTCCAAGTCCGGACCTGTGGGTCCCCCCAACTACAGTGAGGGAACGTTGCCCTATGCCTA TAATTTTTGTGTGCCTGGGGATCAAATGAATCCAGAATTTAATTTTTTCACATCTGTTGATCATTGTCCAGCCAC ACAAGATAACCTCAACAAGATAGCATGCTACTGGCTAGCATTTTAACTCCCAGCGTTGAAGCAGATAAGAAGAT TCTTAAACAGCAAGCCCGCCCAACACGGACTGGCGTTTCTCTCAGGCCCAGAGACCCGGCACCAGCGGCTCCCA AAATGGCGATGACACCGGCACCTGGCCCAACAACCAGTTTGACACAGAGATGCTGCAAGCCATGATCTTGGCGTC CGCCAGTGAAGCTGCTGATGGGAGCTCCACCCTGGGAGGGGGTGCCGGCACCATGGGATTGAGCGCCCGCTACGG ACCCCAGTTCACCCTGCAGCACGTGCCCGACTACCGCCAGAATGTCTACATCCCAGGCAGCAATGCCACACTGAC CAACGCAGCTGGCAAGCGGGATGGCAAGGCCCCAGCAGGTGGCAATGGCAACAAGAAGAAGTCGGGCAAGAAGGA GAAGAAGTAACATGGAGGCCAGGCCAAGAGCCACAGGGCGGCCTCTCCCCAACCAGCCCAGCTTCTCCTTACCTG CACCCAGGCCTCAGAGTTTCAGGGCTAACCCCCAGAATACTGGTAGGGGCCAAGGCCATGCTCCCCTTGGGAAAC AGAAACAAGTGCCCAGTCAGCACCTACCCCTTCCCCCCAGGGGGTTGAATATGCAAAAGCAGTTCCGCTGGGAA CCCCATCCAATCAACTGCTGTACCCATGGGGGTAGTGGGGTTACTGTAGACACCAAGAACCATTTGCCACACCC CCCACTCCAACAGTTCCTCTTTCCCGAGTAAGGTGGTTGGGGTGTTGAAGTACCAAGTAACCTACAAGCCTCCTA GTTCTGAAAAGTTGGAAGGGCATCATGACCTCTTGGCCTCTCCTTTGATTCTCAATCTTCCCCCAAAGCATGGTT TGGTGCCAGCCCCTTCACCTCCTTCCAGAGCCCAAGATCAATGCTCAAGTTTTGGAGGACATGATCACCATCCCC ATGGTACTGATGCTTGCTGGATTTAGGGAGGGCATTTTGCTACCAAGCCTCTTCCCAACGCCCTGGGGACCAGTC

PCT/US2003/028547

1918/6881 FIGURE 1764B

TTCTGTTTTGTTTTCATTGTTTGACGTTTCCACTGCATGCCTTGACTTCCCCCACCTCCTCAAACAAGAGA ATGGACAAAGCTTGACACATCAAGTTATCAAGGCCTTGGAGGAGGCTCTGTATGTCCTCAGGGGACTGACAACAT CCTCCAGATTCCAGCCATAAACCAATAACTAGGCTGGACCCTTCCCACTACATAATAGGGCTCAGCCCAGGCAGC CAGCTTTGGGCTGAGCTAACAGGACCAATGGATTAAACTGGCATTTCAGTCCAAGGAAGCTCGAAGCAGGTTTAG GACCAGGTCCCCTTGAGAGGTCAGAGGGGCCTCTGTGGGTGCTGGGTACTCCAGAGGTGCCACTGGTGGAAGGGT CAGCGGAGCCCCAGCAGGAAGGGTGGGCCAGCCAGCCATCTTAGTCCCTGGGTTGGGGAGGCAGGAGCTAGG GCAGGGACCAAATGAACAGAAAGTCTCAGCCCAGGATGGGGCTTCTTCAACAGGGCCCCTGCCCTGCAAGGCCT CAGTCCTTCACCTTGCCAGGTGCCGTTTCTCTTCCGTGAAGGCCACTGCCCAGGTCCCCAGTGCGCCCCTAGTG GCCATAGCCTGGTTAAAGTTCCCCAGTGCCTCCTTGTGCATAGACCTTCTTCTCCCACCCCCTTCTGCCCCTGGG TCCGCGCAGCCGTCTGTCCTTGATCTGCCCGCGGCGGCCCGTGTTGTGTTTTTGTGCTGTTCCACGCGCTAAGGC GACCCCTCCCCGTACTGACTTCTCCTATAAGCGCTTCTCTTCGCATAGTCACGTAGCTCCCACCCCACCCTCT TTCTTCTGAAAAGCTG

PCT/US2003/028547

FIGURE 1765

MGGSCAQRRRAGPRQVLFPLLPLFYPTLCEPIRYSIPEELAKGSVVGNLAKDLGLSVLDVSARELRVSAEKLHF SVDAQSGDLLVKDRIDREQICKERRRCELQLEAVVENPLNIFHVIVVIEDVNDHAPQFRKDEINLEISESVSLGM GTILESAEDPDISMNSLSKYQLSPNEYFSLVEKDNPDGGKYPELVLQKTLDRETQSAHHLVLTALDGGDPPRSGT AQIRILVIDANDNPPVFSQDVYRVSLREDVPPGTSILRVKATDQDEGINSEITYSFFGVADKAQHVFSLDYTTGN ILTQQPLDFEEVERYTINIEAKDRGSLSTRCKVIVEVVDENDNSPEIIITSLSDQIMEDSPPGVVVALFKTRDQD SGENGEVRCSLSRGVPFKIHSSSNNYYKLVTDEALDREQTPEYNVTIAATDRGKPPLSSSKTITLHITDVNDNAP VFGQSAYLVHVPENNQPGASIAQVSASDPDFGLNGRVSYSLIASDLESRTLSSYVSVSAQSGVVFAQRAFDHEQL RTFELTLQARDQGSPALSANVSLRVLVGDRNDNAPRVLYPALGPDGSALFDTVPRAAQPGYLVTKVVAVDADSGH NAWLSYHVVQASEPGLFSLGLRTGEVRMVRALGDKDSVRQRLLVAVRDGGQPPLSATATLHLVFADSLQEVLPDF SDHPTPSDSQAEMQFYLVVALALISVLFLLAVILAIALRLRQSFSPTAGDCFESVLCSKSGPVGPPNYSEGTLPY AYNFCVPGDQMNPEFNFTSVDHCPATQDNLNKDSMLLASILTPSVEADKKILKQQAPPNTDWRFSQAQRPGTSG SQNGDDTGTWPNNQFDTEMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHVPDYRQNVYIPGSNAT LTNAAGKRDGKAPAGGNGNKKKSGKKEKK

PCT/US2003/028547

1920/6881 FIGURE 1766A

ATCCTCCGCAAGGTGAGAAGCTGGACAGAAATCTGGCGGTGGGCTACCCTTTTGTTCCTCTTTTACCACCTGGGT TACGTTTGTGGGCAGATCCGCTACCCGGTCCCAGAGGAGTCACAGGAAGGGACTTTTGTAGGGAATGTCGCTCAA GATTTCCTGCTGGATACGGACAGTCTGTCAGCTCGCAGGCTGCAGGTCGCTGGAGAGGTGAACCAAAGACACTTC CGTGTGGATTTGGACAGCGGAGCCCTGCTCATCAAGAACCCAATCGACCGAGAGGCACTGTGTGGGCTCAGTGCC AGCTGCATCGTGCCCCTGGAGTTTGTCACCGAAGGTCCTTTGGAAATGTACCGAGCAGAGGTAGAGATCGTAGAT GTGAATGATCACGCCCCCGTTTTCCGCGGCAGCAGCTGGACTTGGAAATTGGGGAGGCAGCTCCTCCAGGACAG CGTTTCCCGTTGGAAAAGGCTCAGGATGCAGATGTGGGGGAGCAATTCGATTAGCAGCTATAGGCTGAGCTCCAAT GAACACTTTGCACTGGATGTGAAGAAGCGCAGCGACGGCAGCCTGGTCCCAGAGCTGCTCCTGGAGAAGCCTTTG GATCGAGAGAAGCAATCGGACTACCGCCTGGTGCTGACTGCTGTCGATGGAGGGAACCCGCCGAGATCTGGCACC GCAGAGCTCCGGGTATCCGTGCTGGACGTAAACGACAACGCCCCAGCCTTCCAGCAATCCAGCTACAGGATTAGT GTGTTGGAGAGCGCACCAGCGGGCATGGTGCTCATCCAGCTCAATGCCTCAGACCCGGACCTGGGTCCCAGTGGT AACGTCACCTTTTATTTCAGTGGTCATACCCCTGATCGTGTAAGAAACCTCTTTAGCCTGCACCCCACTACTGGA AAGCTTACTCTTTTGGGGCCCCTAGACTTTGAGAGTGAGAATTACTATGAATTTGATGTGCGGGCTCGCGATGGG GGTTCTCCAGCCATGGAGCAACATTGCAGCCTTCGAGTGGATCTGCTGGACGTAAATGACAATGCCCCTTACATC ACAGTGACCTCAGAGCTTGGAACCCTCCCCGAGAGTGCAGAACCTGGCACTGTGGTGGCACTTATCAGTGTGCAG GATCCAGACTCAGGGTCAAACGGAGATGTGAGCCTCCGCATTCCTGACCACTTGCCATTTGCCCTCAAGTCTGCC TTCAGGAACCAGTTCTCCCTGGTGACTGCTGGACCCTTGGATCGAGGGCCAAATCTAGCTATGACATCATGGTC ACTGCTTCTGATGCTGGGAACCCTCCTCTCAGTACCCACAGAACTATTTTCCTCAATATTTCAGATGTGAATGAT GATGTATCAGCTTCCTCTTCATCTCTGAACCCCCAGACAGGAGCTGTTCATGCTACTCGATCCTTTGACTAT GTTCGTCTATTTGTGCTGGACCTCAATGACAATGCTCCAGCTGTGCTCCGTCCTCGGGCCCGGCCTGGTTCCTTA TGTCCCCAAGCACTGCCTCCATCAGTTGGTGCTGGCCACCTAATCACAAAGGTGACTGCTGTGGACTTGGATTCA GGTTACAATGCTTGGGTTTCCTATCAGCTCCTGGAGGCCCCAGATCCCAGCCTGTTTGCAGTCTCTCGATATGCT GGGGAGGTGCGGACGGCTGTTCCTATCCCAGCTGACCTCCCACCAGAAGCTGGTCATTGTGGTAAAGGATAGT GGTAGTCCACCACTCTCTACCTCTGTTACTCTCTTAGTGTCCTTAGAGGAAGACACTCATCCAGTTGTCCCAGAT CTTCGAGAATCTTCAGCTCCAAGGGAAGGAGAATCTCGTCTAACCCTCTACTTGGCTGTGTCCCTAGTGGCAATT TGCTTTGTCTCCTTTGGCTCATTCGTGGCACTACTCTCTAAGTGTCTTCGTGGGGCAGCCTGTGGAGTCACATGC CGAATCCAGCTAGGGTCAGATGACCCTATCAAGTTTGTTGATGTGGGAGGCCACTCTCATGGCTGTACACCCTTG GCTTCTGCACCCACTCGGAGTGATAGCTTCATGATGGTGAAGTCACCCAGTGCACCTATGGCAGGGGAGCCTGTT CGCCCAAGCTGCCCACCCTCTGATCTTCTCTATGGGCTAGAGCAAGCCCCGCCCAACACGGACTGGCGTTTCTCT CAGGCCCAGAGACCCGGCACCAGCGGCTCCCAAAATGGCGATGACACCGGCACCTGGCCCAACAACCAGTTTGAC ACAGAGATGCTGCAAGCCATGATCTTGGCGTCCGCCAGTGAAGCTGCTGATGGGAGCTCCACCCTGGGAGGGGGT GCCGGCACCATGGGATTGAGCGCCCGCTACGGACCCCAGTTCACCCTGCAGCACGTGCCCGACTACCGCCAGAAT GTCTACATCCCAGGCAGCAATGCCACACTGACCAACGCAGCTGGCAAGGCGGATGGCAAGGCCCCAGCAGGTGGC AATGGCAACAAGAAGAAGTCGGGCAAGAAGGAGAAGAAGTAACATGGAGGCCAAGAGCCACAGGGCGGCC TCTCCCCAACCAGCCCAGCTTCTCCTTACCTGCACCCAGGCCTCAGAGTTTCAGGGCTAACCCCCAGAATACTGG TAGGGGCCAAGGCCATGCTCCCCTTGGGAAACAGAAACAGTGCCCAGTCAGCACCTACCCCTTCCCCCCAGGG GGTTGAATATGCAAAAGCAGTTCCGCTGGGAACCCCCATCCAATCAACTGCTGTACCCATGGGGGTAGTGGGGTT GCCCATCCATCCCATGCCTCCCTCCCCCACCCCACTCCAACAGTTCCTCTTTCCCGAGTAAGGTGGTTGGGGT GTTGAAGTACCAAGTAACCTACAAGCCTCCTAGTTCTGAAAAGTTGGAAGGGCATCATGACCTCTTGGCCTCTCC TTTGATTCTCAATCTTCCCCCAAAGCATGGTTTGGTGCCAGCCCCTTCACCTCCTTCCAGAGCCCAAGATCAATG CAAGCCTCTTCCCAACGCCCTGGGGACCAGTCTTCTGTTTTGTTTTTCATTGTTTGACGTTTCCACTGCATGCCT TGACTTCCCCCACCTCCTCAAACAAGAGACTCCACTGCATGTTCCAAGACAGTATGGGGTGGTAAGATAAGG

PCT/US2003/028547

1921/6881 FIGURE 1766B

PCT/US2003/028547

1922/6881 FIGURE 1767

MLRKVRSWTEIWRWATLLFLFYHLGYVCGQIRYPVPEESQEGTFVGNVAQDFLLDTDSLSARRLQVAGEVNQRHF
RVDLDSGALLIKNPIDREALCGLSASCIVPLEFVTEGPLEMYRAEVEIVDVNDHAPRFPRQQLDLEIGEAAPPGQ
RFPLEKAQDADVGSNSISSYRLSSNEHFALDVKKRSDGSLVPELLLEKPLDREKQSDYRLVLTAVDGGNPPRSGT
AELRVSVLDVNDNAPAFQQSSYRISVLESAPAGMVLIQLNASDPDLGPSGNVTFYFSGHTPDRVRNLFSLHPTTG
KLTLLGPLDFESENYYEFDVRARDGGSPAMEQHCSLRVDLLDVNDNAPYITVTSELGTLPESAEPGTVVALISVQ
DPDSGSNGDVSLRIPDHLPFALKSAFRNQFSLVTAGPLDREAKSSYDIMVTASDAGNPPLSTHRTIFLNISDVND
NPPSFFQRSHEVFVPENNRPGDLLCSLAASDPDSGLNALISYSLLEPRNRDVSASSFISLNPQTGAVHATRSFDY
EQTQTLQFEVQARDRGNPPLSSTVTVRLFVLDLNDNAPAVLRPRARPGSLCPQALPPSVGAGHLITKVTAVDLDS
GYNAWVSYQLLEAPDPSLFAVSRYAGEVRTAVPIPADLPPQKLVIVVKDSGSPPLSTSVTLLVSLEEDTHPVVPD
LRESSAPREGESRLTLYLAVSLVAICFVSFGSFVALLSKCLRGAACGVTCFPAGTCACLTRSRRREGLPPSNGIL
RIQLGSDDPIKFVDVGGHSHGCTPLASAPTRSDSFMMVKSPSAPMAGEPVRPSCPPSDLLYGLEQAPPNTDWRFS
QAQRPGTSGSQNGDDTGTWPNNQFDTEMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHVPDYRQN
VYIPGSNATLTNAAGKRDGKAPAGGNGNKKKSGKKEKK

PCT/US2003/028547

1923/6881 FIGURE 1768A

ATGGGGCCCAAGACACTCCCACAGCTCGCTGGGAAATGGCAAGTGCTGTGCATGTTGTCCTTGTGCTGCTGGGGC TGGGTGTCTGGGCAGCTTCGTTACTCAGTGGTGGAGGAGTCTGAGCCGGGGACGCTGGTGGGGAATGTTGCTCAG GATCTGGGCTTAAAGATGACAGATCTGTTGAGCCGGCGGCTGCAATTGGGCTCTGAGGAGAATGGGCGCTATTTT TCCCTGAGCTTGATGAGTGGTGCCCTGGCAGTGAATCAAAAGATTGACCGAGAAAGCCTATGTGGAGCCAGCACC AGCTGCCTGCCAGTGCAGGTGGTGACTGAACACCCCCTGGAGCTAATCCGTGTAGAGGTAGAGATCCTGGAT CTCAATGACAACTCTCCTAGCTTTGCCACCCTGAGCGAGAGATGCGCATCTCAGAATCAGCAGCATCTGGGGCA CGATTCCCACTGGACAGTGCCCAGGATCCGGATGTGGGCACCAATACTGTGAGCTTTTACACTCTAAGCCCCAAC AGCCACTTCTCTCTGAATGTGAAGACCCTAAAAGATGGGAAGCCATTCCCAGAGCTGGTGCTAGAGCAGCAGCTG GATCGTGAAGCCCAGGCAAGACATCAGCTGGTGCTTACTGCTGTGGATGGGGGGACCCCAGCCCGCTCAGGGACC ACCCTTATCTCTGTCATCGTGCTGGACATCAATGATAATGCTCCAACCTTCCAATCCTCAGTTCTACGTGTGGGA ATCCCAGAGAATGCACCCATTGGTACTCTGCTGCTCCGCCTCAATGCCACTGATCCAGACGAGGGCACCAACGGC CAACTAGACTATTCTTTTGGAGACCACACATCTGAGGCAGTGCGGAACCTCTTTGGCCTAGACCCTAGCAGTGGG GCAATCCATGTGTTGGGTCCCATAGACTTTGAGGAGTCACGTTTCTATGAAATTCATGCAAGAGCCCGTGACCAG GGACAGCCTGCCATGGAGGGCCACTGTGTGATTCAAGTGGATGTGGGGGGATGTCAATGACAATGCCCCAGAGGTG CTATTGGCCTCTTTGGCCAACCCTGTCCTAGAGAGCACACCAGTGGGCACAGTAGTGGGGTTGTTTAATGTGCGA GACCGGGACTCAGGTAGAAATGGTGAAGTGAGCCTTGATATCTCTCCGGACCTGCCATTTCAGATTAAGCCTTCT GAGAACCACTACTCGCTGCTAACCAGCCAGCCTTTGGACCGGGAGGCCACATCCCACTATATCATCGAGCTGCTG GCCAGCGATGCTGGTTCACCTTCCCTACACAAACATCTCACCATCAGGCTCAACATTTCAGATGTCAATGACAAT GCACCCCGCTTCAACCAGCAGCTTTACACTGCTTACATCCTAGAAAACCGGCCTCCGGGCTCCCTTCTTTGCACT GTGGCTGCCTCAGATCCAGACACTGGGGATAATGCCCGCCTCACCTACTCCATTGTAGGAAATCAGGTTCAGGGA GCCCCAGCCTCCTTTGTGTATGTCAACCCAGAGGATGGACGGATCTTTGCCCAGCGTACCTTTGACTATGAA TTGCTGCAGATGCTGCAGATTGTGGTGGGGGTTCGAGACTCCGGCTCTCCCCCATTGCATGCCAACACATCTCTG CATGTGTTTGTCCTAGACGAGAATGATAATGCCCCAGCTGTGCTGCACCCACGGCCAGACTGGGAACACTCAGCC CCCCAGCGTCTCCCTCGCTCCTCCTGGCTCCTTGGTCACCAAGGTGACAGCCGTGGATGCTGATGCAGGC GGTGAGGTGCGCACAGCCCGGGCCTTACTGGAGGATGACTCTGACACCCAGCAGGTGGTGGTCCTGGTGAGGGAC AATGGTGACCCTTCACTCTCCACAGCCACAGTGCTGCTGGTTCTGGAGGATGAGGACCCTGAGGAAATGCCC AAATCCAGTGACTTCCTCATACACCCTCCTGAGCGTTCAGACCTTACCCTTTACCTCATTGTGGCTCTAGCGACC GTCAGTCTCTTATCCCTAGTCACCTTCACCTTTCTGTCAGCGAAGTGCCTTCAGGGAAACGCAGACGGGGACGGG GGTGGAGGGCAGTGCTGCAGGCCCCAGGACTCACCCTCCCCGGACTTCTATAAGCAGTCCAGCCCCAACCTGCAG GTGAGCTCGGACGCCACAGTACATGGAGGTGACGCTGCGGCCCACAGACTCGCAGAGCCACTGCTACAGG ACGTGCTTTTCACCGGCCTCGGACGGCAGTGACTTCACTTTTCTAAGACCCCTCAGCGTTCAGCAGCCCACAGCT CTGGCGCTGGAGCCTGACGCCATCCGGTCCCGCTCTAATACGCTGCGGGAGCGGAGCCAGCAAGCCCCGCCCAAC ACGGACTGGCGTTTCTCTCAGGCCCAGAGACCCGGCACCAGCGGCTCCCAAAATGGCGATGACACCGGCACCTGG CCCAACAACCAGTTTGACACAGAGATGCTGCAAGCCATGATCTTGGCGTCCGCCAGTGAAGCTGCTGATGGGAGC TCCACCCTGGGAGGGGGTGCCGGCACCATGGGATTGAGCGCCCGCTACGGACCCCAGTTCACCCTGCAGCACGTG CCCGACTACCGCCAGAATGTCTACATCCCAGGCAGCAATGCCACACTGACCAACGCAGCTGGCAAGCGGGATGGC AAGGCCCCAGCAGGTGGCAATGGCAACAAGAAGAAGTCGGGCAAGAAGGAGAAGAAG<u>TAA</u>CATGGAGGCCAGGCC AAGAGCCACAGGGCGGCCTCTCCCCAACCAGCCCAGCTTCTCCTTACCTGCACCCAGGCCTCAGAGTTTCAGGGC TAACCCCCAGAATACTGGTAGGGGCCAAGGCCATGCTCCCCTTGGGAAACAGAAACAAGTGCCCAGTCAGCACCT ACCCCTTCCCCCCAGGGGGTTGAATATGCAAAAGCAGTTCCGCTGGGAACCCCCATCCAATCAACTGCTGTACC CATGGGGGTAGTGGGGTTACTGTAGACACCAAGAACCATTTGCCACACCCCGTTTAGTTACAGCTGAACTCCTCC GAGTAAGGTGGTTGGGGTGTTGAAGTACCAAGTAACCTACAAGCCTCCTAGTTCTGAAAAGTTGGAAGGGCATCA TGACCTCTTGGCCTCTCCTTTGATTCTCAATCTTCCCCCAAAGCATGGTTTGGTGCCAGCCCCTTCACCTCCTTC GGGAGGGCATTTTGCTACCAAGCCTCTTCCCAACGCCCTGGGGACCAGTCTTCTGTTTTGTTTTCATTGTTTGA CGTTTCCACTGCATGCCTTGACTTCCCCCACCTCCTCAAACAAGAGACTCCACTGCATGTTCCAAGACAGTA

PCT/US2003/028547

1924/6881 FIGURE 1768B

PCT/US2003/028547

1925/6881 FIGURE 1769

MGPKTLPQLAGKWQVLCMLSLCCWGWVSGQLRYSVVEESEPGTLVGNVAQDLGLKMTDLLSRRLQLGSEENGRYF SLSLMSGALAVNQKIDRESLCGASTSCLLPVQVVTEHPLELIRVEVEILDLNDNSPSFATPEREMRISESAASGA RFPLDSAQDPDVGTNTVSFYTLSPNSHFSLNVKTLKDGKPFPELVLEQQLDREAQARHQLVLTAVDGGTPARSGT TLISVIVLDINDNAPTFQSSVLRVGIPENAPIGTLLLRLNATDPDEGTNGQLDYSFGDHTSEAVRNLFGLDPSSG AIHVLGPIDFEESRFYEIHARARDQGQPAMEGHCVIQVDVGDVNDNAPEVLLASLANPVLESTPVGTVVGLFNVR DRDSGRNGEVSLDISPDLPFQIKPSENHYSLLTSQPLDREATSHYIIELLASDAGSPSLHKHLTIRLNISDVNDN APRFNQQLYTAYILENRPPGSLLCTVAASDPDTGDNARLTYSIVGNQVQGAPASSFVYVNPEDGRIFAQRTFDYE LLQMLQIVVGVRDSGSPPLHANTSLHVFVLDENDNAPAVLHPRPDWEHSAPQRLPRSAPPGSLVTKVTAVDADAG HNAWLSYSLLPQSTAPGLFLVSTHTGEVRTARALLEDDSDTQQVVVLVRDNGDPSLSSTATVLLVLEDEDPEEMP KSSDFLIHPPERSDLTLYLIVALATVSLLSLVTFTFLSAKCLQGNADGDGGGGQCCRRQDSPSPDFYKQSSPNLQ VSSDGTLKYMEVTLRPTDSQSHCYRTCFSPASDGSDFTFLRPLSVQQPTALALEPDAIRSRSNTLRERSQQAPPN TDWRFSQAQRPGTSGSQNGDDTGTWPNNQFDTEMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHV PDYRQNVYIPGSNATLTNAAGKRDGKAPAGGNGNKKKSGKKEKK

PCT/US2003/028547

1926/6881 FIGURE 1770A

TCATAAAACTGCAATGGTAAAAGCATTTATCCTATTGAAATTCCACAATTTTTATTTGAAAATATTATCGACATG TAATTCAAGTGGCATTTAGAAGAATAATTTAAAAGCAACAACTCTATAGAAAGCTTGTAAAAATGATTAAGTAGTT TAAACCAAATAAAACAATTTCTGAGTCAGTCATCTCCAGTAGGTCTATTTTAGTCTCAAGATAAATTCATTTCTG GTGACAACTGAAGTTCTTAGTTATTTGTTAGTATATTTGGAGACATTTACAATAAAGCTTAGAGCACAATGGGA AATGAAAGTATCATGTTTTTTTTAAGACCAAATGTATTGCAGAAATGTGAGTAATTTAATCCGATGCTACAATCT TCTAGTAGAGTATTACATTTAGAAGTAATCTGTATCTCAGTGCAGTAACTATTTAGGACTGTAAGCGCCGCTGTT CACCTACTGGAAGACAAATGCAACCGAAAACACTCAGATCTCACACCTCACGAAGACCCGCAGATGCCACAAACT AACTGCTGGACTGCAGCGAAACCCGACCCCTGTTTGGAGGCACTCCAGGTTTCCGGAGGATTGTCATCTCCATAG **G**GCCGCTCCACAGAGTCGCCCCAGACGCGGCGAGCTGATCCTGCTGCGCGCTGCTGGGAACGCTGTGGGAAAT CGGGAGGGGACAGATTCGCTACTCTGTGCCAGAAGAGACGGACAAAGGCTCCTTCGTGGGTAATATCTCCAAGGA CCTGGGGCTGGACCCCCGGAAGCTGGCGAAGCACGGAGTCCGTATCGTCTCCAGAGGTAGGACGCAGCTCTTTGC TCTGAACCCGCGCAGCGGCAGCTTGATCACCGCGGGCAGGATAGATCGGGAGGAGCTCTGCGCTCAGAGCCCGCG GTGTCTGATAAATATTAACACCCTGGTTGAGGATAAAGGAAAACTCTTTGGGGTAGAAATAGAAATAATTGATAT TAACGATAATAACCCAAAATTCCAGGTCGAAGATCTAGAAGTAAAAATTAACGAAATCGCGGTTCCTGGAGCACG CCACTTCTCCCTGGACGTGCAGACTGGAGCAATGGAGCCATAAACCCAGAGCTGGTGCTGGAGCGCGCCCTGGA CAGGGAGGAAGAGGCTGCTCACCACCTGGTCCTCACGGCCTCGGATGGCGGCAAGCCGCCTCGCTCTAGCACAGT GCGCATCCACGTGACAGTGTTGGATACAAATGACAATGCCCCGGTTTTTCCTCACCCGATTTACCGAGTGAAAGT AGTGGCATACAAATTCCGGAAAATTAATGAAAAACAAACTCCGTTATTCCAGCTTAATGAAAAATACTGGGGAAAT ATCAATAGCAAAAAGTCTAGATTATGAAGAATGTTCATTTTATGAAATGGAAATACAAGCCGAAGATGTGGGGGC ACTTCTGGGGAGGACCAAATTGCTCATTTCGGTGGAAGATGTAAATGACAATAGACCAGAAGTGATCATTACGTC TTTGTTTAGCCCAGTGTTAGAAAATTCTCTTCCCGGGACAGTAATTGCCTTCTTGAGTGTGCATGACCAAGACTC TGGAAAGAATGGTCAAGTTGTCTGTTACACACGTGATAATTTACCTTTTAAATTAGAAAAGTCAATAGGTAATTA TCTAGGAACACCACCTCTGTCCACTGAAACTCAAATCGCTCTGCACGTGGCAGACATTAACGACAACCCTCCTAC TTTCCCTCATGCCTCCTACTCAGCGTATATCCTAGAGAACAACCTGAGAGGAGCCTCCATCTTTTCCTTGACTGC ACACGACCCCGACAGCCAGGAGAATGCCCAGGTCACTTACTCTGTGACCGAGGACACGCTGCAGGGGGCGCCCCT GTCCTCGTATATCTCCATCAACTCTGACACCGGTGTCCTGTATGCGCTGCAATCTTTCGACTATGAGCAGATCCG ${\tt AGACCTGCAGCTACTGGTAACAGCCAGCGACAGCGGGGACCCGCCCTCAGCAGCAACATGTCACTGAGCCTGTT}$ CGTGCTGGACCAGAATGACAACGCGCCCGAGATCCTGTACCCCGCCCTCCCCACAGACGGTTCCACTGGCGTGGA GCTGGCGCCCCGCTCCGCAGAGCGTGGCTACCTGGTGACCAAGGTGGTGGCGGTGGACAGAGACTCGGGCCAGAA $\tt CGCCTGGCTGTCCTACCGCCTGCTCAAGGCCAGCGAGCCGGGACTCTTCTCGGTGGGTCTGCACACGGGCGAGGT$ GCGCACGGCGAGCCCTGCTGGACAGAGATGCGCTCAAGCAGAGCCTCGTGGTGGCCGTCCAGGACCATGGCCA GCCCCCTCTCCCGCCACTGTCACCGTAGCCGTAGCCGTGACAGCATCCCCGAAGTCCTGACCGAGTTGGG CAGTCTGAAGCCTTCGGTCGACCCGAACGATTCGAGCCTTACACTCTATCTCGTGGTGGCAGTGGCTGCCATCTC GGATTCCGGTGGCAGATTGGTAGGCGTGCCTCACATTTTGTGGGTGTTGAGGAGGTACAGGCTTTCCTGCA GACCTATTCCCAGGAAGTCTCCCTCACCGCCGACTCGCGGAAGAGTCACCTGATCTTTCCCCAGCCCAACTACGC AGACATGCTCATCAGTCAGGAGGGCTGTGAGAAAAATGATTCTTTGTTAACATCCGTAGATTTTCATGAATATAA GAATGAAGCTGATCATGGTCAGCAAGCCCCGCCCAACACGGACTGGCGTTTCTCTCAGGCCCAGAGACCCGGCAC CAGCGGCTCCCAAAATGGCGATGACACCGGCACCTGGCCCAACAACCAGTTTGACACAGAGATGCTGCAAGCCAT GATCTTGGCGTCCGCCAGTGAAGCTGCTGATGGGAGCTCCACCCTGGGAGGGGGTGCCGGCACCATGGGATTGAG CGCCCGCTACGGACCCCAGTTCACCCTGCAGCACGTGCCCGACTACCGCCAGAATGTCTACATCCCAGGCAGCAA

PCT/US2003/028547

1927/6881 FIGURE 1770B

TGCCACACTGACCAACGCAGCTGGCAAGCGGGATGGCAAGGCCCCAGCAGGTGGCAATGGCAACAAGAAGAAGTC ${\tt GGGCAAGAAGAAGAAGAAGAAGCCAAGAGCCAAGAGCCAAGAGCCCAACCAACCAGCCCAGCT}$ TCTCCTTACCTGCACCCAGGCCTCAGAGTTTCAGGGCTAACCCCCAGAATACTGGTAGGGGCCAAGGCCATGCTC CCCTTGGGAAACAGAACAAGTGCCCAGTCAGCACCTACCCCTTCCCCCCAGGGGGTTGAATATGCAAAAGCAG TTCCGCTGGGAACCCCCATCCAATCAACTGCTGTACCCATGGGGGTAGTGGGGTTACTGTAGACACCAAGAACCA CCTCCTCCCCACCCCACTCCAACAGTTCCTCTTTCCCGAGTAAGGTGGTTGGGGTGTTGAAGTACCAAGTAACCT ACAAGCCTCCTAGTTCTGAAAAGTTGGAAGGGCATCATGACCTCTTGGCCTCTCCTTTGATTCTCAATCTTCCCC CAAAGCATGGTTTGGTGCCAGCCCCTTCACCTCCTTCCAGAGCCCAAGATCAATGCTCAAGTTTTGGAGGACATG TGGGGACCAGTCTTCTGTTTTGTTTTCATTGTTTGACGTTTCCACTGCATGCCTTGACTTCCCCCACCTCCTCC GATGGTGGGGGCATGGACAAAGCTTGACACATCAAGTTATCAAGGCCTTGGAGGAGGCTCTGTATGTCCTCAGGG GACTGACAACATCCTCCAGATTCCAGCCATAAACCAATAACTAGGCTGGACCCTTCCCACTACATAATAGGGCTC ${\tt AGCCCAGGCAGCCAGCTTTGGGCTGAGCTAACAGGACCAATGGATTAAACTGGCATTTCAGTCCAAGGAAGCTCG}$ AAGCAGGTTTAGGACCAGGTCCCCTTGAGAGGGTCAGAGGGGCCTCTGTGGGTGCTGGGTACTCCAGAGGTGCCAC CAGGGAGCTAGGGCAGGGACCAAATGAACAGAAAGTCTCAGCCCAGGATGGGGCTTCTTCAACAGGGCCCCTGCC CTCCTGAAGCCTCAGTCCTTCACCTTGCCAGGTGCCGTTTCTCTTCCGTGAAGGCCACTGCCCAGGTCCCCAGTG CGCCCCTAGTGGCCATAGCCTGGTTAAAGTTCCCCAGTGCCTCCTTGTGCATAGACCTTCTTCTCCCACCCCCT TCTGCCCCTGGGTCCCCGGCCATCCAGCGGGGCTGCCAGAGAACCCCAGACCTGCCCTTACAGTAGTGTAGCGCC ${\tt CCCTCCTCTTTCGGCTGGTGTAGAATAGCCAGTAGTGTAGTGCGGTGTGCTTTTACGTGATGGCGGGTGGGCAG}$ ACCCCACCCTCTTCCTGTGTCTCACGCAAGTTTTATACTCTAATATTTATATGGCTTTTTTTCTTCGACAAAAAA ATAATAAAACGTTTCTTCTGAAAAGCTG

PCT/US2003/028547

1928/6881 FIGURE 1771

MAAPQSRPRRGELILLCALLGTLWEIGRGQIRYSVPEETDKGSFVGNISKDLGLDPRKLAKHGVRIVSRGRTQLF
ALNPRSGSLITAGRIDREELCAQSPRCLININTLVEDKGKLFGVEIEIIDINDNNPKFQVEDLEVKINEIAVPGA
RYPLPEAVDPDVGVNSLQSYQLSPNHHFSLDVQTGDNGAINPELVLERALDREEEAAHHLVLTASDGGKPPRSST
VRIHVTVLDTNDNAPVFPHPIYRVKVLENMPPGTRLLTVTASDPDEGINGKVAYKFRKINEKQTPLFQLNENTGE
ISIAKSLDYEECSFYEMEIQAEDVGALLGRTKLLISVEDVNDNRPEVIITSLFSPVLENSLPGTVIAFLSVHDQD
SGKNGQVVCYTRDNLPFKLEKSIGNYYRLVTRKYLDRENVSIYNITVMASDLGTPPLSTETQIALHVADINDNPP
TFPHASYSAYILENNLRGASIFSLTAHDPDSQENAQVTYSVTEDTLQGAPLSSYISINSDTGVLYALQSFDYEQI
RDLQLLVTASDSGDPPLSSNMSLSLFVLDQNDNAPEILYPALPTDGSTGVELAPRSAERGYLVTKVVAVDRDSGQ
NAWLSYRLKASEPGLFSVGLHTGEVRTARALLDRDALKQSLVVAVQDHGQPPLSATVTLTVAVADSIPEVLTEL
GSLKPSVDPNDSSLTLYLVVAVAAISCVFLAFVAVLLGLRLRRWHKSRLLQDSGGRLVGVPASHFVGVEEVQAFL
QTYSQEVSLTADSRKSHLIFPQPNYADMLISQEGCEKNDSLLTSVDFHEYKNEADHGQQAPPNTDWRFSQAQRPG
TSGSQNGDDTGTWPNNQFDTEMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHVPDYRQNVYIPGS
NATLTNAAGKRDGKAPAGGNGNKKKSGKKEKK

PCT/US2003/028547

1929/6881 FIGURE 1772A

GCCTCTACCACAAAGCGGAATGAGATGGATACTCACAGATCCTGACACTGGAGACTTAGAAGTATTTTCCTTC ${\tt GAGAAACCGCGGAATATCGGCTTAGAGCCTGCC} \underline{{\tt ATG}} {\tt GCGAATCGGCTACAGCGCGGGGACCGCAGTCGGCTGCTG}$ ACCGAAAAGGGCTCCTTCGTGGGCAATATCTCCAAGGACCTGGGGCTGGAGCCCCGGGAGCTGGCGAAGCGCGGA GTCCGCATCGTCTCCAGAGGGAAGACACAGCTTTTCGCTGTGAATCCGCGAAGCGGCAGCTTGATCACGGCAGGC AGGATAGACCGGGAGGAGCTCTGTGAGACGGTGTCCTCCTGTTTTTTAAATATGGAACTTCTCGTGGAAGACACC TTGAAGATTTACGGAGTGGAGGTGGAAATAATAGATATTAATGATAACGCCCCCAGCTTCCAGGAGGACGAAGTG GAGATAAAAGTCAGTGAGCACGCAATTCCTGGGGCGCGATTTGCTCTTACTAATGCTAGGGATCCAGATGTGGGC GTGAACTCCCTCCAGAGCTACCAGCTCAGCCCTAATAATTACTTTTCCTTGCAACTGCGGGGCAGAACGGATGGG GCCAAGAATCCAGAGCTAGTACTGGAGGGAAGCCTGGACCGAGAGAAAGAGGCTGCTCACCTCCTCACA GCTTTAGATGGAGGCGATCCCATCCGAAAGGGCGCAGTTCCCATTCGTGTGGTGGTCCTCGATGTAAATGATCAC ATCCCAATGTTTACACAGTCCGTATATCGCGTGAGTGTTCCAGAAAACATCAGCTCCGGAACTCGGGTGCTGATG GTTAATGCAACGGATCCAGACGAGGGAATCAACGGGGAAGTAATGTATTCATTTCGGAACATGGAAAGCAAGGCT TCTGAAATATTCCAATTGGATTCACAAACTGGAGAAGTTCAAGTACGGGGGTCTCTGGATTTTGAAAAATATAGA TTCTATGAGATGGAAATTCAAGGCCAAGATGGTGGAGGTCTCTTTACCACCACGACGATGTTGATCACTGTTGTG GATGTGAATGATAACGCTCCAGAAATAACTATCACCTCTTCTATTAATTCAATTCTGGAAAACTCTCCTCCAGGT ACAGTGATTGCTCTTCTAAATGTGCAAGATCAAGATTCTGGAGAAAATGGTCAAGTCTCCTGTTTTATTCCTAAC CACCTGCCTTTTAAATTAGAAAAGACTTATGGAAATTATTACAAATTGATAACAAGCAGAGTGCTGGACAGGGAG TTGGTCCAGAGCTACAATATAACGTTGACAGCCACAGACCAGGGAAGCCCGCCTTTGTCTGCAGAAACTCATGTC TGGCTGAATGTGGCAGATGACAACGATAACCCTCCCGTTTTTCCTCACTCCTCTTACTCTGCCTACATTCCCGAA AACAACCCCAGGGGTGCCTCCATCTTCTCAGTGACCGCCCTCGACCCGGACAGCAAACAGAATGCCCTGGTCACT TACTCTCTGACGGATGACACTGTCCAGGGGGTGCCTCTGTCCTATGTCTCTATTAACTCCAACACTGGTGTT CTCTATGCCCTACAATCCTTCGACTATGAGCAGTTTCGAGACTTAGAACTGAGAGTGATAGCACGTGACAGCGGG GACCCGCCCTCAGCAGCAACGTGTCGCTGAGCCTGTTCGTGCTGGACCAGAACGACAATGCGCCCGAGATCCTG TACCCTGCCCTCCCCACAGACGGCTCCACTGGCGTGGAGCTGGCGCCCCGCTCTGCGGAACCTGGCTACCTGGTG ACCAAGGTGGTTGCGGTGGACAAAGATTCAGGCCAGAACGCCTGGCTGTCCTATCGCCTGCTTAAGGCCAGCGAG CAGAGACCCGGCACCAGCGGCTCCCAAAATGGCGATGACACCGGCACCTGGCCCAACAACCAGTTTGACACAGAG ATGCTGCAAGCCATGATCTTGGCGTCCGCCAGTGAAGCTGCTGATGGGAGCTCCACCCTGGGAGGGGGTGCCGGC ACCATGGGATTGAGCGCCCGCTACGGACCCCAGTTCACCCTGCAGCACGTGCCCGACTACCGCCAGAATGTCTAC ATCCCAGGCAGCAATGCCACCTGACCAACGCAGCTGGCAAGCGGGATGGCAAGGCCCCAGCAGGTGGCAATGGC ${\tt AACAAGAAGAAGTCGGGCAAGAAGGAGAAGAAGAAG} \underline{{\tt TAA}} {\tt CATGGAGGCCAAGAGCCACAGGGCGGCCTCTCCC}$ CAACCAGCCCAGCTTCTCCTTACCTGCACCCAGGCCTCAGAGTTTCAGGGCTAACCCCCAGAATACTGGTAGGGG CCAAGGCCATGCTCCCCTTGGGAAACAGAACAAGTGCCCAGTCAGCACCTACCCCTTCCCCCCAGGGGGTTGA ATATGCAAAAGCAGTTCCGCTGGGAACCCCCATCCAATCAACTGCTGTACCCATGGGGGTAGTGGGGTTACTGTA CCATCCCATGCCTCCCTCCCCCCCCCCCCCCCACTCCAACAGTTCCTCTTTCCCGAGTAAGGTGGTTGGGGTGTTGAA GTACCAAGTAACCTACAAGCCTCCTAGTTCTGAAAAGTTGGAAGGGCATCATGACCTCTTGGCCTCTCCTTTGAT TCTCAATCTTCCCCCAAAGCATGGTTTGGTGCCAGCCCCTTCACCTCCTTCCAGAGCCCAAGATCAATGCTCAAG ${\tt AGTGTGTGGATGGTGGGGGGCATGGACAAAGCTTGACACATCAAGTTATCAAGGCCTTGGAGGAGGCTCT}$ GTATGTCCTCAGGGGACTGACAACATCCTCCAGATTCCAGCCATAAACCAATAACTAGGCTGGACCCTTCCCACT ACATAATAGGGCTCAGCCCAGGCAGCCAGCTTTGGGCTGAGCTAACAGGACCAATGGATTAAACTGGCATTTCAG TCCAAGGAAGCTCGAAGCAGGTTTAGGACCAGGTCCCCTTGAGAGGTCAGAGGGGCCTCTGTGGGTGCTGGGTAC

PCT/US2003/028547

FIGURE 1772B

PCT/US2003/028547

1931/6881 FIGURE 1773

MANRLQRGDRSRLLLLLCIFLGTLRGFRARQIRYSVPEETEKGSFVGNISKDLGLEPRELAKRGVRIVSRGKTQL
FAVNPRSGSLITAGRIDREELCETVSSCFLNMELLVEDTLKIYGVEVEIIDINDNAPSFQEDEVEIKVSEHAIPG
ARFALPNARDPDVGVNSLQSYQLSPNNYFSLQLRGRTDGAKNPELVLEGSLDREKEAAHLLLLTALDGGDPIRKG
AVPIRVVVLDVNDHIPMFTQSVYRVSVPENISSGTRVLMVNATDPDEGINGEVMYSFRNMESKASEIFQLDSQTG
EVQVRGSLDFEKYRFYEMEIQGQDGGGLFTTTTMLITVVDVNDNAPEITITSSINSILENSPPGTVIALLNVQDQ
DSGENGQVSCFIPNHLPFKLEKTYGNYYKLITSRVLDRELVQSYNITLTATDQGSPPLSAETHVWLNVADDNDNP
PVFPHSSYSAYIPENNPRGASIFSVTALDPDSKQNALVTYSLTDDTVQGVPLSSYVSINSNTGVLYALQSFDYEQ
FRDLELRVIARDSGDPPLSSNVSLSLFVLDQNDNAPEILYPALPTDGSTGVELAPRSAEPGYLVTKVVAVDKDSG
QNAWLSYRLKASEPGLFAVGEHTGEQAPPNTDWRFSQAQRPGTSGSQNGDDTGTWPNNQFDTEMLQAMILASAS
EAADGSSTLGGGAGTMGLSARYGPQFTLQHVPDYRQNVYIPGSNATLTNAAGKRDGKAPAGGNGNKKKSGKKEKK

PCT/US2003/028547

1932/6881 FIGURE 1774

CAGAAAGCCATGTCGGACTCGGCGCCCAGCGCCCAAGCGCTAACCCGCTGAAAGTTTCTCAGCGAAATCTCAGGG CCCGCCCAACACGGACTGGCGTTTCTCTCAGGCCCAGAGACCCGGCACCAGCGGCTCCCAAAATGGCGATGACAC CGGCACCTGGCCCAACAACCAGTTTGACACAGAGATGCTGCAAGCCATGATCTTGGCGTCCGCCAGTGAAGCTGC TGATGGGAGCTCCACCCTGGGAGGGGGTGCCGGCACCATGGGATTGAGCGCCCGCTACGGACCCCAGTTCACCCT GCAGCACGTGCCCGACTACCGCCAGAATGTCTACATCCCAGGCAGCAATGCCACACTGACCAACGCAGCTGGCAA AGGCCAGGCCAAGAGCCACCAGGCCTCTCCCCAACCAGCCTTCTCCTTACCTGCACCCAGGCCTCAGA GTTTCAGGGCTAACCCCCAGAATACTGGTAGGGGCCAAGGCCATGCTCCCCTTGGGAAACAGAAACAAGTGCCCA GTCAGCACCTACCCCTTCCCCCCAGGGGGTTGAATATGCAAAAGCAGTTCCGCTGGGAACCCCCATCCAATCAA $\tt CTGCTGTACCCATGGGGGTAGTGGGGTTACTGTAGACACCAAGAACCATTTGCCACACCCCGTTTAGTTACAGCT$ CCTCTTTCCCGAGTAAGGTGGTTGGGGTGTTGAAGTACCAAGTAACCTACAAGCCTCCTAGTTCTGAAAAGTTGG AAGGGCATCATGACCTCTTGGCCTCTCCTTTGATTCTCAATCTTCCCCCAAAGCATGGTTTGGTGCCAGCCCCTT CACCTCCTTCCAGAGCCCAAGATCAATGCTCAAGTTTTGGAGGACATGATCACCATCCCCATGGTACTGATGCTT GCTGGATTTAGGGAGGGCATTTTGCTACCAAGCCTCTTCCCAACGCCCTGGGGACCAGTCTTCTGTTTTTT CATTGTTTGACGTTTCCACTGCATGCCTTGACTTCCCCCACCTCCTCAAACAAGAGACTCCACTGCATGTTC CACATCAAGTTATCAAGGCCTTGGAGGAGGCTCTGTATGTCCTCAGGGGACTGACAACATCCTCCAGATTCCAGC CTAACAGGACCAATGGATTAAACTGGCATTTCAGTCCAAGGAAGCTCGAAGCAGGTTTAGGACCAGGTCCCCTTG ${\tt AGAGGTCAGAGGGGCCTCTGTGGGTGCTGGGTACTCCAGAGGTGCCACTGGTGGAAGGGTCAGCGGAGCCCCAGC}$ AGGAAGGGTGGGCCAGCCAGGCCATTCTTAGTCCCTGGGTTGGGGAGGCAGGGAGCTAGGGCAGGGACCAAATGA ACAGAAAGTCTCAGCCCAGGATGGGGCTTCTTCAACAGGGCCCCTGCCCTCAAGCCTCAGTCCTTCACCTTG CCAGGTGCCGTTTCTCTTCCGTGAAGGCCACTGCCCAGGTCCCCAGTGCGCCCCCTAGTGGCCATAGCCTGGTTA AAGTTCCCCAGTGCCTCCTTGTGCATAGACCTTCTTCTCCCACCCCCTTCTGCCCCTGGGTCCCGGCCATCCAG GTCCTTGATCTGCCCGCGGCGCCCCTGTTGTGTTTTTGTGCTGTGTCCACGCGCTAAGGCGACCCCCTCCCCCGT ACTGACTTCTCCTATAAGCGCTTCTCTCGCATAGTCACGTAGCTCCCACCCCACCCTCTTCCTGTGTCTCACGC AAGTTTTATACTCTAATATTTATATGGCTTTTTTTCTTCGACAAAAAAATAATAAAACGTTTCTTCTGAAAAGCT

PCT/US2003/028547

FIGURE 1775

 ${\tt MVPEAWRSGLQAPPNTDWRFSQAQRPGTSGSQNGDDTGTWPNNQFDTEMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHVPDYRQNVYIPGSNATLTNAAGKRDGKAPAGGNGNKKKSGKKEKK}$

PCT/US2003/028547

1934/6881 FIGURE 1776

CAGAAAGCCATGTCGGACTCGGCGCCCAGCGCCCAAGCGCTAACCCGCTGAAAGTTTCTCAGCGAAATCTCAGGG CACCGGGAGGGTAGTGGGAGTTTTGCTTCTGCTTGGTGCCTTGAACAAGGCTTCCACGGTCATTCACTATGAGAT CCCGGAGGAAAGAGAGAGAGGGTTTCGCTGTGGGCAACGTGGTCGCGAACCTTGGTTTGGATCTCGGTAGCCTCTC AGCCCGCAGGTTCCGGGTGTCTGGAGCTAGCCGAAGATTCTTTGAGGTGAACCGGGAGACCGGAGAGATGTT TGTGAACGACCGTCTGGATCGAGAGGAGCTGTGTGGGACACTGCCCTCTTGCACTGTAACTCTGGAGTTGGTAGT GGAGAACCCGCTGGAGCTGTTCAGCGTGGAAGTGGTGATCCAGGACATCAACGACAACAATCCTGCTTTCCCTAC CCAGGAAATGAAATTGGAGATTAGCGAGGCCGTGGCTCCGGGGACGCGCTTTCCGCTCGAGAGCGCGCACGATCC CGATGTGGGAAGCAACTCTTTACAAACCTATGAGCTGAGCCGAAATGAATACTTTGCGCTTCGCGTGCAGACGCG GGAGGACAGCACCAAGTACGCGGAGCTGGTGTTGGAGCGCGCCCTGGACCGAGAACGGGAGCCTAGTCTCCAGTT CGTGGTACAAGTCCTTGCAACGGATCTGGATGAAGGCCCCAACGGTGAAATTATTTACTCCTTCGGCAGCCACAA CCGCGCCGGCGTGCGGCAACTATTCGCCTTAGACCTTGTAACCGGGATGCTGACAATCAAGGGTCGGCTGGACTT CGAGGACACCAAACTCCATGAGATTTACATCCAGGCCAAAGACAAGGGCGCCAATCCCGAAGGAGCACATTGCAA AGTGTTGGTGGAGGTTGTGGATGTGAATGACAACGCCCCGGAGATCACAGTCACCTCCGTGTACAGCCCAGTACC GACCTGCGAAGTTCCACCGGGTCTCCCTTTCAGCCTTACTTCTTCCCTCAAGAATTACTTCACTTTGAAAACCAG TGCAGACCTGGATCGGGAGACTGTGCCAGAATACAACCTCAGCATCACCGCCCGAGACGCCGGAACCCCTTCCCT CTCAGCCCTTACAATAGTGCGTGTTCAAGTGTCCGACATCAATGACAACCCTCCACAATCTTCTCAATCTTCCTA CGACGTTTACATTGAAGAAAACAACCTCCCCGGGGCTCCAATACTAAACCTAAGTGTCTGGGACCCCGACGCCCC GCAGAATGCTCGGCTTTCTTTCTTTCTCTTGGAGCAAGGAGCTGAAACCGGGCTAGTGGGTCGCTATTTCACAAT AAATCGTGACAATGGCATAGTGTCATCCTTAGTGCCCCTAGACTATGAGGATCGGCGGGAATTTGAATTAACAGC TCATATCAGCGATGGGGGCACCCCGGTCCTAGCCACCAACATCAGCGTGAACATATTTGTCACTGATCGCAATGA CAATGCCCCCCAGGTCCTATATCCTCGGCCAGGTGGGAGCTCGGTGGAGATGCTGCCTCGAGGTACCTCAGCTGG CCACCTAGTGTCACGGGTGGTAGGCTGGGACGCGGATGCAGGGCACAATGCCTGGCTCTCCTACAGTCTCTTGGG ATCCCCTAACCAGAGCCTTTTTGCCATAGGGCTGCACACTGGTCAAATCAGTACTGCCCGTCCAGTCCAAGACAC AGATTCACCCAGGCAGACTCTCACGGTCTTGATCAAAGACAATGGGGAGCCTTCGCTCTCCACCACTGCTACCCT CACTGTGTCAGTAACCGAGGACTCTCCTGAAGCCCGAGCCGAGTTCCCCTCTGGCTCTGCCCCCGGGAGCAGAA AAAAAATCTCACCTTTTATCTACTTCTTTCTCTAATCCTGGTTTCTGTGGGGTTTGTGGTCACAGTGTTCGGAGT AATCATATTCAAAGTTTACAAGTGGAAGCAGTCTAGAGACCTATACCGAGCCCCGGTGAGCTCACTGTACCGAAC ACCAGGGCCCTCCTTGCACGCGGACGCCGTGCGGGGAGGCCTGATGTCGCCGCACCTTTACCATCAGGTGTATCT CACCACGGACTCCCGCCGCCGCCCCCCTGCTGAAGAAACCTGGTGCAGCCAGTCCACTGGCCAGCCGCCAGAA CACGCTGCGGAGCTGTTGTTCTATAGGCAGGTGTTGGGTGCAGAGAGCGCCCCTCCCGGACAGGTAAG TTTTAGTGATGAAGATGTTTTCCTGGTGATGCATTCACACTTTCAACTGGCCCTTCCTAGATCAAAGTTAGTGCC ${\tt TTTG} \underline{{\tt TGA}}{\tt GATGGTGGCCAGAGTGTGGTTTGTGGTCCCATTTCAGGGGGAAGATACTTGACTCATCTGTGGA$ CCTAATTCACATCCTCAGC

PCT/US2003/028547

FIGURE 1777

MVPEAWRSGLVSTGRVVGVLLLLGALNKASTVIHYEIPEEREKGFAVGNVVANLGLDLGSLSARRFRVVSGASRR FFEVNRETGEMFVNDRLDREELCGTLPSCTVTLELVVENPLELFSVEVVIQDINDNNPAFPTQEMKLEISEAVAP GTRFPLESAHDPDVGSNSLQTYELSRNEYFALRVQTREDSTKYAELVLERALDREREPSLQLVLTALDGGTPALS ASLPIHIKVLDANDNAPVFNQSLYRARVLEDAPSGTRVVQVLATDLDEGPNGEIIYSFGSHNRAGVRQLFALDLV TGMLTIKGRLDFEDTKLHEIYIQAKDKGANPEGAHCKVLVEVVDVNDNAPEITVTSVYSPVPEDAPLGTVIALLS VTDLDAGENGLVTCEVPPGLPFSLTSSLKNYFTLKTSADLDRETVPEYNLSITARDAGTPSLSALTIVRVQVSDI NDNPPQSSQSSYDVYIEENNLPGAPILNLSVWDPDAPQNARLSFFLLEQGAETGLVGRYFTINRDNGIVSSLVPL DYEDRREFELTAHISDGGTPVLATNISVNIFVTDRNDNAPQVLYPRPGGSSVEMLPRGTSAGHLVSRVVGWDADA GHNAWLSYSLLGSPNQSLFAIGLHTGQISTARPVQDTDSPRQTLTVLIKDNGEPSLSTTATLTVSVTEDSPEARA EFPSGSAPREQKKNLTFYLLLSLILVSVGFVVTVFGVIIFKVYKWKQSRDLYRAPVSSLYRTPGPSLHADAVRGG LMSPHLYHQVYLTTDSRRSDPLLKKPGAASPLASRQNTLRSCDPVFYRQVLGAESAPPGQVRFSKSCLTLLVLFY SYIILRKEWSCFFSDEDVFLVMHSHFQLALPRSKLVPL

PCT/US2003/028547

1936/6881 FIGURE 1778

CCTCAGTTTCCTTGTTTGTAAAATAGTTGAACTAAATCTTGACCCTTTAATGCTTGTTTTGAAATCCAAGGCAAA
AAACAATTGCAAGCGCCCTTACTTCCGTGTTGCTTCATACTCCTCTTGCGCCTGCGCTGTCTCCTTGGAGCAGAG
GCGGGGCCAACAAGCCTGTTTTAGAAACCCTCCAGTCCTTAGCTCGTTTAGAACACAAGACTCCAAGCTTATTGG
AGGGCTATCTTGCCTTACGGCTCCAAGCCGCTTTTTACGGCGTTTTCAGCTCGCCATTCACTTCGCTGTGAAGA
TGGCGTCGGGCAGCGGGGTAGGTGTTGTGTCTGAGGAGGAGGAGGTTTTGCGGGGTGGGGAATGGTTTTTCAGACCTG
AATAGAGACAAACTCCTGCACCCGACTGGCTTCCCGATATCTCCTCGAGATCCCAGGGTTCAGGTTCAAGAACTC
CCCAGTAATAGGCCTTGGCAGAGGGTCAGTAGAATCGCGGAGGTTTCTCGGGTTGGGGTCTTGAGGCTACCTCAG
TCTTCTCGTACAGTCCAAAGAGGCTTCGCTTTCAAAACGTCCTGTAGACACCTGGACCGCGAGGGCGCGGTTCCC
TGCTTCTCTAGGGGCCCAGACACGGCGACGGATCTTGACGCTTTTTCCTCCCCACAGACAAAAAACTTGGACTTT
CGCCGAAAGTGGGACAAAGATGAATATGAGAAACTCGCCGAGAAGAGGGCTCACGGAAGAGAGAAAAAAACTTGGACTT
GGGAAAACCAGTGCAGCCTGTCAAGCGAGAGCTTTTACGGCATAGGGACTACAAGGTGGACTTGGAATCCAAGCTT
GGGAAGACAATTGTCATTACCAAGACAACCC

PCT/US2003/028547

1937/6881 FIGURE 1779

TCGATAGCCGGAAGTCATCCTTGCTGAGGCTGGGGCAACCACCGCAGGTCGAGACAGCAGGCGGCTCAAGTGGAC $\mathtt{AGCCGGG}$ \mathtt{ATG} $\mathtt{GCAGAGCGTGCGGCGCTGGAGGGCTGGTGAAACTTCAGGGAGGCGCGTGCGAGGCCTCAAGCA$ GCAGAAGGCCAGCGCGAGCTGATCGAGGAGGAGGTGGCGAAACTCCTGAAACTGAAGGCACAGCTGGGTCCTGA TGAAAGCAAACAGAAATTTGTGCTCAAAACCCCCAAGGGCACAAGAGACTATAGTCCCCGGCAGATGGCAGTTCG CGAGAAGGTGTTTGACGTAATCATCCGTTGCTTCAAGCGCCACGGTGCAGAAGTCATTGATACACCTGTATTTGA ACTAAAGGAAACACTGATGGGAAAGTATGGGGAAGACTCCAAGCTTATCTATGACCTGAAGGACCAGGGCGGGA GCTCCTGTCCCTTCGCTATGACCTCACTGTTCCTTTTGCTCGGTATTTGGCAATGAATAAACTGACCAACATTAA ACGCTACCACATAGCAAAGGTATATCGGCGGGATAACCCAGCCATGACCCGTGGCCGATACCGGGAATTCTACCA GTGTGATTTTGACATTGCTGGGAACTTTGATCCCATGATCCCTGATGCAGAGTGCCTGAAGATCATGTGCGAGAT CCTGAGTTCACTTCAGATAGGCGACTTCCTGGTCAAGGTAAACGATCGACGCATTCTAGATGGGATGTTTGCTAT CTGTGGTGTTTCTGACAGCAAGTTCCGTACCATCTGCTCCTCAGTAGACAAGCTGGACAAGGTGTCCTGGGAAGA GGTGAAGAATGAGATGGTGGGAGAGAGGGCCTTGCACCTGAGGTGGCTGACCGCATTGGGGACTATGTCCAGCA ACATGGTGGGGTATCCCTGGTGGAACAGCTGCTCCAGGATCCTAAACTATCCCAAAACAAGCAGGCCTTGGAGGG CCTGGGAGACCTGAAGTTGCTCTTTGAGTACCTGACCCTATTTGGCATTGATGACAAAATCTCCTTTGACCTGAG GGAAGAGCCCCTGGGTGTGGGCAGTGTGGCTGCTGGAGGACGCTATGATGGGCTAGTGGGCATGTTCGACCCCAA AGGGCGCAAGGTGCCATGTGTGGGGCTCAGCATTGGGGTGGAGCGGATTTTCTCCATCGTGGAACAGAGACTAGA GGCTTTGGAGGAGAAGATACGGACCACGGAGACACAGGTGCTTGTGGCATCTGCACAGAAGAAGCTGCTAGAGGA AAGACTAAAGCTTGTCTCAGAACTGTGGGATGCTGGGATCAAGGCTGAGCTGCTGTACAAGAAGAACCCAAAGCT ACTGAACCAGTTACAGTACTGTGAGGAGGCAGGCATCCCACTGGTGGCTATCATCGGCGAGCAGGAACTCAAGGA TGGGGTCATCAAGCTCCGTTCAGTGACGAGCAGGGAAGAGGTGGATGTCCGAAGAGAAGACCTTGTGGAGGAAAT ACTATTTGAGGTTAAGACAAACTGCATATGTACTTCAATTGCTTTGCACTTTTCCGTTTCAGCGGAAGACCTGAA GAGTGGTCAGAACAGAGCCTTTGATTTTATTATGGTTATTTTATTGATTATTACTGGCAAAAACGGCCAGGTAC AACACCTTTTTCATACAAGGCCCAGGAGGCTTAGTCCAGTCTGTGCTCCTGGGCTACAAGGACCCAGCCTGAGAT GGTCCCATCTGCAGGGCCCCGCACCAGTTGGAGCAGATGCCTCCCCACCACCAATTGCCAAAAGGTCCAATAAAAT GCCTCAACCACGGAAAAAAAAAAAAAAAAAAAAA

PCT/US2003/028547

FIGURE 1780

MAERAALEELVKLQGERVRGLKQQKASAELIEEEVAKLLKLKAQLGPDESKQKFVLKTPKGTRDYSPRQMAVREK VFDVIIRCFKRHGAEVIDTPVFELKETLMGKYGEDSKLIYDLKDQGGELLSLRYDLTVPFARYLAMNKLTNIKRY HIAKVYRRDNPAMTRGRYREFYQCDFDIAGNFDPMIPDAECLKIMCEILSSLQIGDFLVKVNDRRILDGMFAICG VSDSKFRTICSSVDKLDKVSWEEVKNEMVGEKGLAPEVADRIGDYVQQHGGVSLVEQLLQDPKLSQNKQALEGLG DLKLLFEYLTLFGIDDKISFDLSLARGLDYYTGVIYEAVLLQTPAQAGEEPLGVGSVAAGGRYDGLVGMFDPKGR KVPCVGLSIGVERIFSIVEQRLEALEEKIRTTETQVLVASAQKKLLEERLKLVSELWDAGIKAELLYKKNPKLLN QLQYCEEAGIPLVAIIGEQELKDGVIKLRSVTSREEVDVRREDLVEEIKRRTGQPLCIC

PCT/US2003/028547

1939/6881 FIGURE 1781

ACGCAAAGCAGTGTGGGTTGATTCTGAGGTGCACTGTGGGAAAGAGCTTGTCGCTGCGGTGTTGCTGTTGGAGAC TCGATTGTTGGTGACAGCGAAAGAACGATAACAAA<u>ATG</u>CCGGAGCGAGATAGTGAGCCGTTCTCCAACCCTTTGG CCCCCGATGGCCACGATGTGGATGATCCTCACTCCTTCCACCAATCAAAACTCACCAATGAAGACTTCAGGAAAC TTCTCATGACCCCCAGGGCTGCACCTACCTCTGCACCACCTTCTAAGTCACGTCACCATGAGATGCCAAGGGAGT ACAATGAGGATGAAGACCCAGCTGCACGAAGGAGGAAAAAGAAAAGTTATTATGCCAAGCTACGCCAACAAGAAA TTGAGAGAGAGAGAGAGCTAGCAGAAAGTACCGGGATCGTGCCAAGGAACGGAGAGATGGAGTGAACAAAGATT ATGAAGAAACCGAGCTTATCAGCACCACAGCTAACTATAGGGCTGTTGGCCCCACTGCTGAGGCGGACAAATCAG CTGCAGAGAAGAGAGACAGTTGATCCAGGAGTCCAAATTCTTGGGTGGTGACATGGAACACACCCATTTGGTGA AAGGCTTGGATTTTGCTCTGCTTCAAAAGGTACGAGCTGAGATTGCCAGCAAAGAGAAAAGAGAAGAGAACTGA TGGAAAAGCCCCAGAAAGAAACCAAGAAAGATGAGGATCCTGAAAATAAAATTGAATTTAAAACACGTCTGGGCC GCAATGTTTACCGAATGCTTTTTAAGAGCAAAGCATATGAGCGGAATGAGTTGTTCCTGCCGGGCCGCATGGCCT ATGTGGTAGACCTGGATGATGAGTATGCTGACACAGATATCCCCACCACTCTTATCCGCAGCAAGGCTGATTGCC CCACCATGGAGGCCCAGACCACACTGACCACAAATGACATTGTCATTAGCAAGCTGACCCAGATCCTTTCATACC TGAGGCAGGGAACCCGTAACAAGAAGCTTAAGAAGAAGGATAAAGGGAAGCTGGAAGAAGAAAACCTCCTGAGG CTGACATGAATATTTTTGAAGACATTGGGGATTACGTACCCTCCACAACCAAGACACCTCGGGACAAGGAGCGGG AGAGATATCGGGAACGGGAGCGTGATCGGGAAAGAGACAGAGACCGTGACCGAGAGCGAGAGCGAGAACGAGATC TAGATGATGAGCCCATGGACGTTGACAAAGGACCTGGGTCTACCAAGGAGTTGATCAAGTCCATCAATGAAAAGT TTGCTGGGTCTGCTGGCTGGGAAGGCACAGAATCGCTGAAGAAGCCAGAAGACAAAAAGCAGCTGGGAGATTTCT TGGATTATAGCAAAATGGACCAGGGTAACAAGAAGGGGCCCTTAGGCCGTTGGGACTTTGATACCCAGGAAGAAT ACAGCGAGTATATGAACAACAAAGAAGCTTTGCCCAAGGCTGCATTCCAGTATGGTATCAAAATGTCTGAAGGGC GGAAAACCAGGCGCTTCAAGGAAACCAATGACAAAGCAGAGCTTGATCGCCAGTGGAAGAAGATTAGTGCAATCA TTGAGAAGAGGAAGAAGATGGAAGCTGATGGGGTTGAAGTCAAAAGACCAAAATAC<u>TAA</u>

PCT/US2003/028547

1940/6881 FIGURE 1782

MPERDSEPFSNPLAPDGHDVDDPHSFHQSKLTNEDFRKLLMTPRAAPTSAPPSKSRHHEMPREYNEDEDPAARRR KKKSYYAKLRQQEIERERELAEKYRDRAKERRDGVNKDYEETELISTTANYRAVGPTAEADKSAAEKRRQLIQES KFLGGDMEHTHLVKGLDFALLQKVRAEIASKEKEEEELMEKPQKETKKDEDPENKIEFKTRLGRNVYRMLFKSKA YERNELFLPGRMAYVVDLDDEYADTDIPTTLIRSKADCPTMEAQTTLTTNDIVISKLTQILSYLRQGTRNKKLKK KDKGKLEEKKPPEADMNIFEDIGDYVPSTTKTPRDKERERYRERERDRERERDRERERERDRERERERDRERE EEKKRHSYFEKPKVDDEPMDVDKGPGSTKELIKSINEKFAGSAGWEGTESLKKPEDKKQLGDFFGMSNSYAECYP ATMDDMAVDSDEEVDYSKMDQGNKKGPLGRWDFDTQEEYSEYMNNKEALPKAAFQYGIKMSEGRKTRRFKETNDK AELDRQWKKISAIIEKRKKMEADGVEVKRPKY

WO 2004/030615 PCT/US2003/028547

1941/6881 FIGURE 1783

GTGACCCCAGGCCCTGGTCACTCCATGCTTTGGAGGGTGCTTTTGTCAAAGAGGCCTCCTTTCCCTCACCCAGAG CTGGATTTCCAAGAGGCTCCCATACCTAGCTGCCCTGGCAGACTCCCAGGGAAGAAAACAGCGTGGCCTTGGCA GCTGCCCGAGGAAGGACCCACAGGTGACAGGGAGAAGCCATTGCCATTCCCTGTCCTGGCCCCTTCAGCAAC CCTGAACACTCTGCTCCAGCCAAGGTGGTGAGGGCAGCTGTTCCTAAACAGCGCAAAGGCAGCAAGGTTGGTGAC TTTGGAGATGCAATCAATTGGCCCACACCTGGAGAGATAGCCCACAAGAGTGTTCAGCCACAGTCCCACAAGCCT AGTCCAAAAACCAAATCAGATGAATCAGGGGAGGAAAAGAATGGAGATGAGGATTGCCAGCGAGGCGGGCAGAAG AAGAAAGGAAACACAAGTGGGTTCCATTACAAATAGACATGAAGCCTGAAGTGCCCAGAGAGAAACTGGCT TCACGCCCCACTCGCCCACCGGAGCCTAGACACATACCTGCCAATCGCGGAGAGATCAAAGGGTCTGAGTCTGCC GGTCGCGGCCGGGGCCGGGGTGCCACTCGAACCCATTTTGACTACCAGTTTGGCTACCGAAAGTTTGAT GGTGTGGAGGGCCTCGTACGCCCAAGTACATGAACACATCACCTACTTTGACAATGTCAGCAGCACCGAG CTTTACAGTGTGGATCAGGAACTGCTCAAAGACTACATCAAGCGCCAGATTGAATACTACTTCAGCGTGGACAAT CACCGAGTGCAGGCCCTTACCACTGACATTTCACTCATCTTTGCGGCCCTAAAGGACAGCAAGGTGGTGGAGATC GTTGATGAGAAAGTTCGTAGGAGGAGGAACCAGAAAAGTGGCCTCTTCCCCCAATAGTGGATTATTCACAGACT GATTTCTCCCAGCTTCTCAACTGCCCTGAATTTGTTCCCCGTCAGCACTACCAAAAGGAGACAGAGTCGGCACCT GGCTCTCCTCGTGCAGTCACCCCAGTGCCAACCAAAACAGAGGAGGTCAGCAACCTAAAGACACTACCCAAGGGC CTGTCTGCCAGCCTGCCTGACCTGGATTCTGAGAACTGGATTGAAGTGAAGAAGAGGCCTCGGCCATCCCCAGCA CGGCCCAAGAAGTCAGAGGAGTCCAGATTTTCCCACCTGACCTCTCTGCCTCAGCAGCTGCCTTCCCAGCAGCTG AAGAACACCTTCACTGCCTGGTCTGATGAGGAATCTGACTATGAGATTGATGACAGGGATGTCAACAAGATCCTC AAGATGAGCGCCGAACTGGCCAAGGTCATTAATGATGGCCTCTTCTACTATGAGCAGGACCTGTGGGCTGAAAAG TTTGAACCTGAGTATTCCCAGATCAAGCAAGAAGTCGAGAACTTCAAAAAGGTCAATATGATCAGCCGGGAGCAG TTTGACACTGACCCCTGAGCCCCCTGTGGATCCCAACCAGGAAGTTCCTCCTGGGCCACCTCGGTTCCAGCAA GTTCCTACGGATGCCCTGGCCAACAAGTTGTTTGGTGCTCCTGAGCCCTCCACCATCGCCCGCTCTCTACCAACC ACTGTCCCAGAGTCACCAAACTACCGCAACACCAGGACCCCTCGCACTCCCCGGACACCACAGGTCAAAGACTCA ACAAGACACAGTTCAAACCCACCCTTGGAGAGCCATGTGGGCTGGGTGATGGATTCCCGTGAGCACAGGCCCCGT TGACCAATGCTCTCTACTCCCTGCAGAGATGGCACAGACTGCAAATAGGCATGCTTTTGAAGAAAATATACAATT GATCTTTGAACAACGAAGGGCGTGGGGTGCCCAGCTGCACACAGTTGAAAATCCGTGTATAACTTTTGACTCTCC AAAAGCCTACTGTTAACCAGAAGCCTTACCAATAACATATAGTCAATTAGCACATGTTTTGCATATTATGTAT TACATACTGTATTCTTACAATAAGCTAAATAA

PCT/US2003/028547

1942/6881 FIGURE 1784

MKEQEKGEGSDSKESPKTKSDESGEEKNGDEDCQRGGQKKKGNKHKWVPLQIDMKPEVPREKLASRPTRPPEPRH
IPANRGEIKGSESATYVPVAPPTPAWQPEIKPEPAWHDQDETSSVKSDGAGGARASFRGRGRGRGRGRGRGRGGT
RTHFDYQFGYRKFDGVEGPRTPKYMNNITYYFDNVSSTELYSVDQELLKDYIKRQIEYYFSVDNLERDFFLRRKM
DADGFLPITLIASFHRVQALTTDISLIFAALKDSKVVEIVDEKVRRREEPEKWPLPPIVDYSQTDFSQLLNCPEF
VPRQHYQKETESAPGSPRAVTPVPTKTEEVSNLKTLPKGLSASLPDLDSENWIEVKKRPRPSPARPKKSEESRFS
HLTSLPQQLPSQQLMSKDQDEQEELDFLFDEEMEQMDGRKNTFTAWSDEESDYEIDDRDVNKILIVTQTPHYMRR
HPGGDRTGNHTSRAKMSAELAKVINDGLFYYEQDLWAEKFEPEYSQIKQEVENFKKVNMISREQFDTLTPEPPVD
PNQEVPPGPPRFQQVPTDALANKLFGAPEPSTIARSLPTTVPESPNYRNTRTPRTPRTPQLKDSSQTSRFYPVVK
EGRTLDAKMPRKRKTRHSSNPPLESHVGWVMDSREHRPRTASISSSPSEGTPTVGSYGCTPQSLPKFQHPSHELL
KENGFTQHVYHKYRRRCLNERKRLGIGQSQEMNTLFRFWSFFLRDHFNKKMYEEFKQLALEDAKEGYRYGLECLF
RYYSYGLEKKFRLDIFKDFQEETVKDYEAGQLYGLEKFWAFLKYSKAKNLDIDPKLQEYLGKFRRLEDFRVDPPM
GEEGNHKRHSVVAGGGGGEGRKRCPSOSSSRPAAMISQPPTPPTGOPVREDAKWTSOHSNTQTLGK

WO 2004/030615 PCT/US2003/028547

1943/6881 FIGURE 1785

GGCACGAGGGAAGAGCTCCCACCTTCTCTGGATGTGCCTGGGCTTGGACTGGCTAGAATCTTTCTCTGGACTGTT GCATGTACAGTGCCTCCATCCTGGAGGCAAGAGAGTTGGGAGTGGCTCGAATCAGAGCCGTGCCCAAGATATCCC GTTGCCTCACGCCAGGCCCCGTCCTGCCGTGACACCCTTCATCCTACCCTTGGAACCCCAAGGCCAAGTTGGTTC AAACTGTTGGAGAACAGAGTTGGCCTGCATCTGGAACACACTTGTCCTCAGCTTACCATCTCCTCACACCCCAGA GTGGAAAGGTGAACACCTGCAGCTGAGGCTTGGAAACGTTTCTTGTGTTGCCCTGAAAAATCTTTGAGACCTCAG GGAGGCTCTGTCTCTCTTAAAAGGTGGAGAAAGATGCCATTCTCTCCCTAAGGTCTGGTGGAGTCTCCCCATCTT GCATACCCTTCTGCAAGCCATCTATCTCTGCTCACTCTCCAATTGACCCGCCTGGGAACAAGGGATGAGGAGGAG TTGGGGGCTGGGGGGAATCCTGCCAGTTGGTGAAGCCCTGTGGCAGGAAGGTATATGTGGACATAGAGTATACCT GATTCTCTTCTTCAGCCACTGACTGCTTGGGTTGGGCTGTGAATGATAATGGAATGGCTGGAGTCTGCTGTTGT CTTTTCAACTGGTTCCTCTGTTGGGCCCAAAGGTTGGGAGTAGGAGACAGTATCCCAGGCTGACAAGGGCTTGCC GAAGCCCATCTCAGTTCCTGTGACTTCATGTCTCAAACCAAGGATGAGCGTCTGGTCTCTGCTATGATGGTGGTA TCCGAGGCCTTTCCCTGCCCAGTCTGGTGCCTGCCCCACATTGTACCGGACACTGGATTCCTGGACCCCCTTCTC CTTTCCTTTCTTCAGGTCACGCAGCCCTGTACTGTATCCAGCACCACAGAAACCTCAGTGTTTTTCCTCT GCTGGTTTGGGGCACAAGGAAGCCTTAGGGTATGGGGAAAGGCTGTTATTACCTAGAGTTTACTCCCAGGCCAGG GGGCTGCCATCTTCTCACAGACATCCCTGAAAGGAAGCCCCTTTGGGGCAGGAGGTGAGGACTTCATCTCAAC ${\tt GTAAC} \underline{\textbf{ATG}} \\ \texttt{TTAGGAGTTAATGTTGCAAAGAGTAGTTTACATCTTCACTTTCTGAAGACACTTGAATTTAGGACCG} \\$ ATGTATCTGTGACAAGCATGCCAGAAGTGGCAGGGGCCATCAGGGCTAACCACTTCACACCTACCATCGTCCCAT $\tt GGGGATCCAAGACC\underline{TGA}GATAAAGCAACAGCCTGCCCAGATCCCTCTGTTCATCCTATCCCTTCCAAGGTTGGTC$ CATGCCAACATAACCTCTGGGCATCAGACATCAGCAGGTCTGTGTGCCTCAGCCCTGTTAAGGGGCAGGTTTCTC TTTAGCCCTCTTCCTGCACTTGGGAGCAAAGGCACTACCAGTAGAGAAGGGCCATCCAGCCGTGCCCCAGCCTGG ACCCCTGGGGCTCAGATAGAGGTGCTGAGCCCCTGTGTCAAAGTTGTTAAATGTTTTTGTTTTCCATTGTAG GAAGTGAGGAGGAGGACAAGGAAGATGACTAGTTACGGAGGGTGAGGGTTGTTTTTTGCCAAAAAGCCTGGGTA GAGTGATCTGAATTATCTGGCACCCTCCTGAATGGAACCCCAGAGTACCTCCTGTGTGGAAGGGTCCCTGGATTT TCCCTAACACCCACCTCTCCCCCTTCAGCCATGCTGATGGCAGAAGATAAGAACTTGGAGCCCATTTCTCAC TGGAGAGAAACTTGTCATCTGGCTTTGCGGAGAAGGTTCCACCTTACGCTCGTAGTACATTATCTTTACTATG TGCTAGGATATCATATTTAAAAGGACAAAAAAATGTAAAATACTTGAATGAGCTTGTATTATAACATTAATATTA AA

PCT/US2003/028547

FIGURE 1786

 ${\tt MLGVNVAKSSLHLHFLKTLEFRTDVSVTSMPEVAGAIRANHFTPTIVPWGSKT}$

WO 2004/030615 PCT/US2003/028547

1945/6881 FIGURE 1787

GCGGTCTTATATAAGCCAGATCCGCAGGGGAGTCCGCAGAAGGGTTAAACAGGTCTTTGGGCTTCGGCGACCTCG CCCGCGGCAGAAACCGGTAAGAAGACAGTGGGCTGCGCGTCTCATTTTCAGCCTTGCCCGGACTCTCCCAAAGCC GGCGCCCAGTAGTGGCTCCAGAGCCCACAGGTGGCCCCCGGCAGTCTCTGGGGCGCATGGAGCGGCGTTAATAGG ${\tt GCTGGCGGCGCAGGCCAGTAGCCGCTCCAAC}$ CCCGCACCCTGCGCACCCCATGCTCCACGAACCCTTCCTCTTCGGTCCGGCCTCGCGCTGTCATCAGGAAAGGCC CGCTGCAGCCGCCACCGCCTATGGTCCTGACGCCAGGCCTGGGCAGAGCCCCGGGCGGCTGGAGGCGCTTGGCGG CCGTCTTGGCCGGCGGAAAGGCTCAGGACCCAAGAAGGAGCGGAGACGCACTGAGAGCATTAACAGCGCATTCGC GGAGTTGCGCGAGTGCATCCCCAACGTGCCGGCCGACACCAAGCTCTCCAAGATCAAGACTCTGCGCCTAGCCAC CAGCTACATCGCCTACCTGATGGACGTGCTGGCCAAGGATGCACAGTCTGGCGATCCCGAGGCCTTCAAGGCTGA ACTCAAGAAGGCGGATGGCGGCCGTGAGAGCAAGCGGAAAAGGGAGCTGCAGCAGCACGAAGGTTTTCCTCCTGC CCTGGGCCCAGTCGAGAAGAGGATTAAAGGACGCACCGGCTGGCCGCAGCAAGTCTGGGCGCTGGAGTTAAACCA CGAACGCCAGGCTCTGGGCTCCGGCGACTGGTGCTACGCATCCCGCGGAGCTTCTGCTGAGCGCCGGCAGGTCGT CGGCTGCAACCACACTTGGATCGCACGTGCAATGTCCTTTGATTTTTTTAATACATTAAGAGAAAAGAGAAAT ATATATATATCCACCCCAGCCCAACCGAGGGGCGCCCTTGGCGGCAACATGCAAGAAGGAGGGACTGTCGAACC CAAGGGCTCAAAGACGCACTCTTCCACCCTTTTGGAGCGAATTTAGAACCTCAGCCCTATCTCCATTTCCCTATC TGGCTCTTTCTCTCTTGTCCCTCCATATGATCCGCCCCGACGCCGTCTTCTCTAATTAAAATGCAATAAGGAATC AATTCTTTCTTGCCTGAGAAAGAGAACCAGACGCAGGAAGATGAAAGGCTGCCCTTTGTTCTTCGAATCGTGGT GGTTTTATTTTATTTTTTTTTTTTTTTTCTCTCTCTCTTTTAGTTCCAAGGGAAACACTTTCTCTCTTTCTCTG ACCTCAAGTCTGTGTGACCACTCACAGCCCCCCCCCCCTCGCCAAAGCAGTGTCTATGCTCTTGATTAATAAAAC ATTTTCTGAAATCAAAAAAAAAAAA

PCT/US2003/028547

FIGURE 1788

 ${\tt MNLVGSYAHHHHHHPPPAHPMLHEPFLFGPASRCHQERPYFQSWLLSPADAAPDFPAGGPPPAAAAAATAYGPD} \\ {\tt ARPGQSPGRLEALGGRLGRRKGSGPKKERRRTESINSAFAELRECIPNVPADTKLSKIKTLRLATSYIAYLMDVL} \\ {\tt AKDAQSGDPEAFKAELKKADGGRESKRKRELQQHEGFPPALGPVEKRIKGRTGWPQQVWALELNQ} \\ {\tt CAMBAQSGDPEAFKAELKKADGGRESKRKRELQQHEGFPPALGPVEKRIKGRTGWPQQVWALELNQ} \\ {\tt CAMBAQSGDPEAFKAELKADGGRESKRKRELQQHEGFPPALGPVEKRIKGRTGWPQQVWALELNQ} \\ {\tt CAMBAQSGDPEAFKAELKADGGRESKRKRELQQHEGFPPALGPVEKRIKGRTGWPQQVWALELNQ } \\ {\tt CAMBAQSGDPEAFKAELKADGGRESKRKRELQQHEGFPPALGPVEKRIKGRTGWPQQVWALELNQ } \\ {\tt CAMBAQSGDPEAFKAGT } \\ {\tt CAMBAQSGDPAGT } \\$

WO 2004/030615 PCT/US2003/028547

1947/6881 FIGURE 1789

<u>ATG</u>CACTATTCTAAGGAATATAGGCAGATGTACAGAACTGAAATTCGAATGACAAGGATGGCAAGAAAAGCTGGCAACTTCTATGTACCTGCAGAACCCAAATTGGAGTTTGTCATCAGGATCAGAGTATCAATGAGTGATCAGATTCATAACTATACTGTTGGAAAAACGCTTCAAAGAAGCAAATAACTTTCTGTGGCCCTTCAAATTACCTTTTCCACCAAGGAGTGAAGAAAAAGACCACTTATTTTGTAGAAGGTGGAAATGCTGGCAACAGGGAGGACCAGATCAACAGGCCTTATTTAGAAGAATGAACTTAACTTAGAAGAATGAACTTAA

PCT/US2003/028547

1948/6881 FIGURE 1790

MHYSKEYRQMYRTEIRMTRMARKAGNFYVPAEPKLEFVIRIRGINGDQIHKIYTVGKRFKEANNFLWPFKLPFPP GRVKKKTTYFVEGGNAGNREDQINRLIRRMN

PCT/US2003/028547

1949/6881 FIGURE 1791

GATCAGGGCCGAGTTGTCTCGGCGGCGCTGCCGAGGCCTCCACCCAGGACAGTCCCCCTCCCCGGGCCTCTCTCCC TCTTGCCTACGAGTCCCCTCTCCTCGTAGGCCTCTCGGATCTGATATCGTGGGGTGAGGTGAGCAGGCCCGGGGA ${\tt GGGTGGTTACCGCTGAGGAGCTGCAGTCTCTGTCAAG}$ GCTACACCAGCTGAATGCCCTGTTGGAACAGGAGTCTAGATGTCAGCCAAAGGTCTGTGGTTTGAGACTAATTGA GTCTGCACACGATAATGGCCTCAGAATGACTGCAAGACTAAGGGACTTTGAAGTAAAAGATCTTCTTAGTCTAAC TCAGTTCTTTGGCTTTGACACAGAGACATTTTCTCTAGCTGTGAATTTACTGGACAGATTCCTGTCTAAAATGAA GGTACAGCCCAAGCACCTTGGGTGTTGGACTGAGCTGCTTTTATTTGGCTGTAAAATCAATAGAAGAGGAAAG GAATGTCCCATTGGCAACTGACTTGATCCGAATAAGTCAATATAGGTTTACGGTTTCAGACTTGATGAGAATGGA AAAGATTGTATTGGAGAAGGTGTTGGAAAGTCAAAGCTACTACTGCCTTTCAATTTCTGCAACTGTATTATTC ACTCCTTCAAGAGAACTTGCCACTTGAAAGGAGAAATAGCATTAATTTTGAAAGACTAGAAGCTCAACTGAAGGC ATGTCATTGCAGGATCATATTTTCTAAAGCAAAGCCTTCTGTGTTGGCATTGTCTATCATTGCATTAGAGATCCA AGCACAGAAGTGTGTAGAGTTAACAGAAGGAATAGAATGTCTTCAGAAACATTCCAAGATAAATGGCAGAGATCT GACCTTCTGGCAAGAGCTTGTATCCAAATGTTTAACTGAATATTCATCAAATAAGTGTTCCAAACCAAATGTTCA GAAGTTGAAATGGATTGTTTCTGGGCGTACTGCACGGCAATTGAAGCATAGCTACTACAGAATAACTCACCTTCC AACAATTCCTGAAATGGTCCCT TAA CTGGATTATTACAGCACCAAAAAACTTCTCTGAAGCCTTTCTCCACAACCTTGTTCTATGGATTCCATAATGTTACAATGGATTTAAGCTATGAAGCCTCAAAACATCACGAGATAAGCATGATG GTCTCAGACTTGGGAAAACTGCCTAATATTATGCTGTAGTGGAATTATGTTTATGATTTGAATTCATCTGTGAAG GCATTCAAATCAAAGCTAAAAGCCTAAATGTGAAATGCTAATGACAAGCCTGAGAAGGTAAACTATGAATCTTCA TTTCTATCATTGATCTAACTTTAGATATTGGATCAATATATTTAGGTGGTATTGAAAATGCTATTGGAGGAGTCA CACTAATACTATCAACTATCAGTCTTCCCACAGCTTCAATCACTGTCATTATTCTAATCCTACTCACTTAAAT TTTAAGTTATGAGGTTTATGTCGAAAGCAACATTTCACAAATGTACTTTTAAGGCATAATAAGGGTTAACATTCT AGG

PCT/US2003/028547

1950/6881 FIGURE 1792

MIEVLTTTDSQKLLHQLNALLEQESRCQPKVCGLRLIESAHDNGLRMTARLRDFEVKDLLSLTQFFGFDTETFSL AVNLLDRFLSKMKVQPKHLGCVGLSCFYLAVKSIEEERNVPLATDLIRISQYRFTVSDLMRMEKIVLEKVCWKVK ATTAFQFLQLYYSLLQENLPLERRNSINFERLEAQLKACHCRIIFSKAKPSVLALSIIALEIQAQKCVELTEGIE CLQKHSKINGRDLTFWQELVSKCLTEYSSNKCSKPNVQKLKWIVSGRTARQLKHSYYRITHLPTIPEMVP WO 2004/030615 PCT/US2003/028547

1951/6881 FIGURE 1793A

GTAGAGTTAAGGAAGGGCCTCTTCCTCTGTGAGAATTCAGCATTTTGCAACCATCCAAAAATGTTGAGGGCATGC TTTGCTTCCAGGGCAGACAGAGCACAGTGAGCATGGGACACAGGATCCCTGACTTGCTGTGCCCTTAAAC CAACGTGGACCTGCTTGAAGAGCTTCCCCTCCCCGACCAGCAGCCATGCATCGAGCCTCCACCTTCCTCCATCAT GTACCAGGCTAACTTTGACACAAACTTTGAGGACAGGAATGCATTGTCACGGGCATTGCAAGGTACATTGAGCA CAGCTGTTCCCGGGCCATTCCCAGGTGAAATGCAACGAGCAGCCCAACCGAGTAGAGATCTATGAGAAGACAGTA GAGGTGCTGGAGCCGGAGGTCACCAAGCTCATGAAGTTCATGTATTTTCAGCGCAAGGCCATCGAGCGGTTCTGC AAGTTCATCAACATGTTTGCTGTCCTGGATGAGCTAAAGAACATGAAGTGCAGCGTCAAGAATGACCACTCTGCC TACAAGAGGGCAGCACAGTTCCTGCGGAAGATGGCAGATCCCCAGTCTATCCAGGAGTCGCAGAACCTTTCCATG TTCCTGGCCAACCACACAGGATCACCCAGTGTCTCCACCAGCAACTTGAAGTGATCCCAGGCTATGAGGAGCTG CTGGCTGACATTGTCAACATCTGTGTGGATTACTACGAGAACAAGATGTACCTGACTCCCAGTGAGAAACATATG AAGAGAATTAATCTTAGCAAAATTGATAAATTCTTTAAGCAGCTGCAGGTGGTGCCCCTTTTCGGCGACATGCAG ATAGAGCTGGCCAGATACATTAAGACCAGTGCTCACTATGAAGAGAACAAGTCCAAGTGGACGTGCACCCAGAGC AGCATCAGCCCCCAGTACAATATCTGCGAGCAGATGGTTCAGATCCGGGATGACCACATCCGCTTCATCTCCGAG CTCGCTCGCTACAGCAACAGTGAGGTGGTGACGGGCTCAGGGCTGGACAGCCAGAAGTCAGACGAGGAGTATCGC GAGCTCTTCGACCTAGCCCTGCGGGGTCTGCAGCTTCTATCCAAGTGGAGCGCCCACGTCATGGAGGTGTACTCT TGGAAGCTGGTTCATCCCACAGACAAGTTCTGCAACAAGGACTGTCCTGGCACCGCGGAGGAATATGAGAGAGCC ACACGCTACAATTACACCAGTGAGGAAAAATTTGCCTTCGTTGAGGTGATCGCCATGATCAAAGGCCTGCAGGTG CTCATGGGCAGGATGGAGAGCGTCTTCAACCAGGCCATCAGGAACACCATCTACGCGGCATTGCAGGACTTCGCC CAGGTGACGCTGCGTGAGCCCCTGCGGCAGGCGGTACGGAAGAAGAAGAATGTCCTCATCAGCGTCCTACAGGCA CCCAAAGGTGGATTTGATATCAAGGTGCCCCGGCGTGCTGTGGGGCCATCCAGCACACAGCTGTACATGGTGCGG GTCCTCGCCATAGAGGACTTTCACAAACAGTCCTTCTTCTTCACACATCTGCTCAACATCAGTGAAGCCCTGCAG CAGTGTTGTGACCTCTCCCAGCTCTGGTTCCGAGAATTCTTCCTGGAGTTAACCATGGGCCGACGAATCCAGTTC CCCATCGAGATGTCCATGCCCTGGATTCTAACGGACCATATCCTGGAAACCAAAGAACCTTCCATGATGGAGTAT GTCCTCTACCCTCTGGATCTGTACAACGACAGCGCCTACTATGCTCTGACCAAGTTTAAAAAAGCAGTTCCTGTAC GATGAGATAGAAGCTGAGGTGAACCTGTGTTTTGATCAGTTTGTCTACAAGCTGGCAGACCAGATCTTTGCTTAC TACAAAGCCATGGCTGGCAGTGTCCTGTTGGATAAACGTTTTCGAGCTGAGTGTAAGAATTATGGCGTCATCATT CCGTATCCACCGTCCAATCGCTATGAAACACTGCTGAAGCAGAGACACGTCCAGCTGTTGGGTAGATCAATTGAC TTGAACAGACTCATTACCCAGCGCATCTCTGCCGCCATGTATAAATCCTTGGACCAAGCTATCAGCCGCTTTGAG AGTGAGGACCTGACCTCCATTGTGGAGCTGGAGTGGCTGCTGGAGATTAACCGGCTCACGCATCGGCTGCTCTGT AAGCATATGACGCTGGACAGCTTCGATGCCATGTTCCGAGAGGCCAATCACAATGTGTCCGCCCCCTATGGCCGT ATCACCCTGCATGTCTTCTGGGAACTGAACTTTGACTTTCTCCCCAACTACTGCTACAATGGGTCCACTAACCGT TTTGTGCGGACTGCCATTCCTTTCACCCAAGAACCACAACGAGACAAACCTGCCAACGTCCAGCCTTATTACCTC TATGGATCCAAGCCTCTCAACATTGCCTACAGCCACATCTACAGCTCCTACAGGAATTTCGTGGGGCCACCTCAT TTCAAGACTATCTGCAGACTCCTGGGTTATCAGGGCATCGCTGTGGTCATGGAGGAACTGCTAAAGATTGTGAAG AGCTTGCTCCAAGGAACCATTCTCCAGTATGTGAAAACACTGATAGAGGTGATGCCCCAAGATATGCCGCTTGCCC CGACATGAGTATGGCTCCCCAGGGATCCTGGAGTTCTTCCACCACCAGCTGAAGGACATCATTGAGTACGCAGAG CTCAAAACAGACGTGTTCCAGAGCCTGAGGGAAGTGGGCAATGCCATCCTCTTCTGCCTCCTCATAGAGCAAGCT CTGTCTCAGGAGGAGGTCTGCGATTTGCTCCATGCCGCACCCTTCCAAAACATCTTGCCTAGAGTCTACATCAAA GAGGGGGAGCCCTGGAGGTCCGGATGAAACGTCTGGAAGCCAAGTATGCCCCGCTCCACCTGGTCCCTCTGATC GAGCGGCTGGGGACCCCTCAGCAAATCGCCATTGCTCGCGAGGGTGACCTCCTGACCAAGGAGCGGCTGTGCTGT GGCCTGTCCATGTTCGAGGTCATCCTGACCCGCATTCGGAGCTACCTGCAGGACCCCATCTGGCGGGGCCCACCG

PCT/US2003/028547

1952/6881 FIGURE 1793B

PCT/US2003/028547

FIGURE 1794

MKFMYFQRKAIERFCSEVKRLCHAERRKDFVSEAYLLTLGKFINMFAVLDELKNMKCSVKNDHSAYKRAAQFLRK MADPQSIQESQNLSMFLANHNRITQCLHQQLEVIPGYEELLADIVNICVDYYENKMYLTPSEKHMLLKVMGFGLY LMDGNVSNIYKLDAKKRINLSKIDKFFKQLQVVPLFGDMQIELARYIKTSAHYEENKSKWTCTQSSISPQYNICE QMVQIRDDHIRFISELARYSNSEVVTGSGLDSQKSDEEYRELFDLALRGLQLLSKWSAHVMEVYSWKLVHPTDKF CNKDCPGTAEEYERATRYNYTSEEKFAFVEVIAMIKGLQVLMGRMESVFNQAIRNTIYAALQDFAQVTLREPLRQ AVRKKKNVLISVLQAIRKTICDWEGGREPPNDPCLRGEKDPKGGFDIKVPRRAVGPSSTQLYMVRTMLESLIADK SGSKKTLRSSLDGPIVLAIEDFHKQSFFFTHLLNISEALQQCCDLSQLWFREFFLELTMGRRIQFPIEMSMPWIL TDHILETKEPSMMEYVLYPLDLYNDSAYYALTKFKKQFLYDEIEAEVNLCFDQFVYKLADQIFAYYKAMAGSVLL DKRFRAECKNYGVIIPYPPSNRYETLLKQRHVQLLGRSIDLNRLITQRISAAMYKSLDQAISRFESEDLTSIVEL EWLLEINRLTHRLLCKHMTLDSFDAMFREANHNVSAPYGRITLHVFWELNFDFLPNYCYNGSTNRFVRTAIPFTQ EPQRDKPANVQPYYLYGSKPLNIAYSHIYSSYRNFVGPPHFKTICRLLGYQGIAVVMEELLKIVKSLLQGTILQY VKTLIEVMPKICRLPRHEYGSPGILEFFHHQLKDIIEYAELKTDVFQSLREVGNAILFCLLIEQALSQEEVCDLL HAAPFQNILPRVYIKEGERLEVRMKRLEAKYAPLHLVPLIERLGTPQQIAIAREGDLLTKERLCCGLSMFEVILT ${\tt RIRSYLQDPIWRGPPPTNGVMHVDECVEFHRLWSAMQFVYCIPVGTNEFTAEQCFGDGLNWAGCSIIVLLGQQRR}$ FDLFDFCYHLLKVQRQDGKDEIIKNVPLKKMADRIRKYQILNNEVFAILNKYMKSVETDSSTVEHVRCFQPPIHQ SLATTC

PCT/US2003/028547

1954/6881 FIGURE 1795

PCT/US2003/028547

FIGURE 1796

MATLIYVDKENGEPGTRVVAKDGLKLGSGPSIKALDGRSQVSTPRFGKTFDAPPALPKATRKALGTVNRATEKSV KTKGPLKQKQPSFSAKKMTEKTVKAKSSVPASDDAYPEIEKFFPFNPLDFESFDLPEEHQIAHLPLSGVPLMILD EERELEKLFQLGPPSPVKMPSPPWESNLLQSPSSILSTLDVELPPVCCDIDI

PCT/US2003/028547

1956/6881 FIGURE 1797 .

PCT/US2003/028547

1957/6881 FIGURE 1798A

GCAACTGGACAACAACCACATCAGCTGCATTGAAGATGGAGCCTTCCGAGCGCTGCGCGATTTGGAGATCCTTAC CCTCAACAACAACAACATCAGTCGCATCCTGGTCACCAGCTTCAACCACATGCCGAAGATCCGAACTCTGCGCCT CCACTCCAACCACCTGTACTGCGACTGCCACCTGGCCTGGCTCTCGGATTGGCTGCGACAGCGACAGTTGG CCAGTTCACACTCTGCATGGCTCCTGTGCATTTGAGGGGCTTCAACGTGGCGGATGTGCAGAAGAAGGAGTACGT GTGCCCAGCCCCCACTCGGAGCCCCCATCCTGCAATGCCAACTCCATCTCCTGCCCTTCGCCCTGCACGTGCAG CAATAACATCGTGGACTGTCGAGGAAAGGGCTTGATGGAGATTCCTGCCAACTTGCCGGAGGGCATCGTCGAAAT ACGCCTAGAACAGAACTCCATCAAAGCCATCCCTGCAGGAGCCTTCACCCAGTACAAGAAACTGAAGCGAATAGA GTATGGGAACAAGATCACCGAGATTGTCAAGGGACTGTTTGATGGGCTGGTGTCCCTACAGCTGCTCCTCAA TGCCAACAAGATCAACTGCCTGCGGGTGAACACGTTTCAGGACCTGCAGAACCTCAACTTGCTCTCCCTGTATGA CCCATTTGTGTGCGACTGCCACTTGAAGTGGCTGGCCGACTACCTCCAGGACAACCCCATCGAGACAAGCGGGGC CCGCTGCAGCAGCCCGCCGACTCGCCAACAAGCGCATCAGCCAGATCAAGAGCAAGAAGTTCCGCTGCTCAGG GGGCACGATTGTGGACTGCTCCAACCAGAAGCTGGTCCGCATCCCAAGCCACCTCCCTGAATATGTCACCGACCT GCGACTGAATGACAATGAGGTATCTGTTCTGGAGGCCACTGGCATCTTCAAGAAGTTGCCCAACCTGCGGAAAAT GCTGACAGGGAACCAGCTGGAGACCGTGCACGGGCGCGTGTTCCGTGGCCTCAGTGGCCTCAAAACCTTGATGCT GAGGAGTAACTTGATCGGCTGTGTGAGTAATGACACCTTTGCCGGCCTGAGTTCGGTGAGACTGCTGTCCCTCTA TGACAATCGGATCACCACCATCACCCTGGGGCCTTCACCACGCTTGTCTCCCTGTCCACCATAAACCTCCTGTC CAACCCCTTCAACTGCAACTGCCACCTGGCCTGGCTCGGCAAGTGGTTGAGGAAGAGGCGGATCGTCAGTGGGAA CCCTAGGTGCCAGAAGCCATTTTTCCTCAAGGAGATTCCCATCCAGGATGTGGCCATCCAGGACTTCACCTGTGA TGGCAACGAGGAGAGTAGCTGCCAGCTGAGCCCGCGCTGCCCGGAGCAGTGCACCTGTATGGAGACAGTGGTGCG CCACCTAACAGCCGTGCCCAGAGAGCTGTCCGCCCTCCGACACCTGACGCTTATTGACCTGAGCAACAACAGCAT CAGCATGCTGACCAATTACACCTTCAGTAACATGTCTCACCTCTCCACTCTGATCCTGAGCTACAACCGGCTGAG GTGCATCCCCGTCCACGCCTTCAACGGGCTGCGGTCCCTGCGAGTGCTAACCCTCCATGGCAATGACATTTCCAG CTGCAGTCTTCGGTGGCTGTCGGAGTGGGTGAAGGCGGGGTACAAGGAGCCTGGCATCGCCCGCTGCAGTAGCCC TGAGCCCATGGCTGACAGGCTCCTGCTCACCACCCCAACCCACCGCTTCCAGTGCAAAGGGCCAGTGGACATCAA CATTGTGGCCAAATGCAATGCCTGCCTCTCCAGCCCGTGCAAGAATAACGGGACATGCACCCAGGACCCTGTGGA GCTGTACCGCTGTGCCTGCCCCTACAGCTACAAGGGCAAGGACTGCACTGTGCCCATCAACACCTGCATCCAGAA CCCCTGTCAGCATGGAGGCACCTGCCACCTGAGTGACAGCCACAAGGATGGGTTCAGCTGCTCCTGCCCTCTGGG CTTTGAGGGGCAGCGGTGTGAGATCAACCCAGATGACTGTGAGGACAACGACTGCGAAAACAATGCCACCTGCGT GGACGGGATCAACAACTACGTGTGTATCTGTCCGCCTAACTACACAGGTGAGCTATGCGACGAGGTGATTGACCA CTGTGTGCCTGAGCTGAACCTCTGTCAGCATGAGGCCAAGTGCATCCCCCTGGACAAAGGATTCAGCTGCGAGTG TGTCCCTGGCTACAGCGGGAAGCTCTGTGAGACAGACAATGATGACTGTGTGGCCCACAAGTGCCGCCACGGGGC CCAGTGCGTGGACACAATCAATGGCTACACATGCACCTGCCCCCAGGGCTTCAGTGGACCCTTCTGTGAACACCC $\tt CCCACCCATGGTCCTACTGCAGACCAGCCCATGCGACCAGTACGAGTGCCAGAACGGGGCCCAGTGCATCGTGGT$ GCAGCAGGAGCCCACCTGCCGCTGCCCACCAGGCTTCGCCGGCCCCAGATGCGAGAAGCTCATCACTGTCAACTT CGTGGGCAAAGACTCCTACGTGGAACTGGCCTCCGCCAAGGTCCGACCCCAGGCCAACATCTCCCTGCAGGTGGC CACTGACAAGGACAACGGCATCCTTCTCTACAAAGGAGACAATGACCCCCTGGCACTGGAGCTGTACCAGGGCCA CGTGCGGCTGGTCTATGACAGCCTGAGTTCCCCTCCAACCACAGTGTACAGTGTGGAGACAGTGAATGATGGGCA GTTTCACAGTGTGGAGCTGGTGACGCTAAACCAGACCCTGAACCTAGTAGTGGACAAAGGAACTCCAAAGAGCCT GGGGAAGCTCCAGAAGCAGCCAGCAGTGGGCATCAACAGCCCCCTCTACCTTGGAGGCATCCCCACCTCCACCGG CCTCTCTGCCTTGCGCCAGGGCACGGACCGGCCTCTAGGCGGCTTCCACGGATGCATCCATGAGGTGCGCATCAA CAACGAGCTGCAGGACTTCAAGGCCCTCCCACCACAGTCCCTGGGGGTGTCACCAGGCTGCAAGTCCTGCACCGT GTGCAAGCACGGCCTGTGCCGCTCCGTGGAGAAGGACAGCGTGGTGTGCGAGTGCCGCCCAGGCTGGACCGGCCC

PCT/US2003/028547

1958/6881 FIGURE 1798B

PCT/US2003/028547

1959/6881 FIGURE 1799

PCT/US2003/028547

1960/6881 FIGURE 1800

 ${\tt GGCACGAGGGTGAGACGCTGATGGGAGG}$ AGAAGAGATTAAATCTCTGACTGCTGAAATTGACCGGTTGAAAAACTGTGGCTGTTTAGGAGCTTCTCCAAATTT GGAGCAGTTACAAGAAGAAAATTTAAAATTAAAGTATCGACTGAATATTCTTCGAAAGAGTCTTCAGGCAGAAAG GAACAAACCAACTAAAAATATGATTAACATTATTAGCCGCCTACAAGAGGTCTTTGGTCATGCAATTAAGGCTGC ATATCCAGATTTGGAAAATCCTCCTCTGCTAGTGACACCAAGTCAGCAGGCCAAGTTTGGGGACTATCAGTGTAA TAGTGCTATGGGTATTTCTCAGATGCTCAAAACCAAGGAACAGAAAGTTAATCCAAGAGAAATTGCTGAAAACAT TACCAAACACCTCCCAGACAATGAATGTATTGAAAAAGTTGAAATTGCTGGTCCTGGTTTTATTAATGTCCACTT AAGAAAGGATTTTGTATCAGAACAATTGACCAGTCTTCTAGTGAATGGAGTTCAACTACCTGCTCTGGGAGAGAA TAAAAAGGTTATAGTTGACTTTTCCTCCCCTAATATAGCTAAAGAGATGCATGTAGGCCACCTGAGGTCAACTAT CATAGGAGAGAGTATAAGCCGCCTCTTTGAATTTGCAGGGTATGACGTGCTCAGGTTAAATCATGTAGGAGACTG GGGGACCCAGTTTGGCATGCTCATCGCTCACCTGCAAGACAAATTTCCAGATTATCTAACAGTTTCACCTCCTAT TGGGGATCTTCAGGTCTTTTATAAGGAATCTAAGAAGAGGTTTGATACTGAGGAGGAATTTAAGAAGCGAGCATA TCAGTGTGTAGTTCTGCTCCAGGGTAAAAACCCAGATATTACAAAAGCTTGGAAGCTTATCTGTGATGTCTCCCG GATGAATGATATTGTAAAGGAATTTGAAGATAGAGGATTTGTGCAGGTGGATGATGGCAGAAAGATTGTATTTGT CCCAGGGTGTTCCATACCATTAACCATAGTAAAATCAGATGGAGGTTATACCTATGATACATCTGACCTGGCTGC TATTAAACAAAGACTATTTGAGGAAAAAGCAGATATGATTATCTATGTTGTGGACAATGGACAATCTGTGCACTT CCAGACAATATTTGCTGCTGCTCAAATGATTGGTTGGTATGACCCTAAAGTAACTCGAGTCTTCCATGCTGGATT TGGTGTGGTGCTAGGGGAAGACAAGAAAAAGTTTAAAACACGTTCGGGTGAAACAGTGCGCCTCATGGATCTTCT GAATGCTGCTCAGACATCCGTTGCATATGGCTGCATCAAATATGCTGACCTTTCCCATAACCGGTTGAATGACTA CATCTTCTCCTTTGACAAAATGCTAGATGACAGAGGAAATACAGCTGCTTACTTGTTGTATGCCTTCACTAGAAT CAGGTCTATTGCACGTCTGGCCAATATTGATGAAGAAATGCTCCAAAAAGCTGCTCGAGAAACCAAGATTCTTTT GGATCATGAGAAGGAATGGAAACTAGGCCGGTGCATTTTACGGTTCCCTGAGATTCTGCAAAAGATTTTAGATGA CTTATTTCTCCACACTCTCTGTGATTATATATATGAGCTGGCAACTGCTTTCACAGAGTTCTATGATAGCTGCTA CTGTGTGGAGAAAGATAGACAGACTGGAAAAATATTGAAGGTGAACATGTGGCGTATGCTGCTATGTGAAGCAGT ${\tt AGCTGCTGTCATGGCCAAGGGGTTTGATATCCTGGGAATAAAACCTGTCCAAAGGATG{\color{red}{TAA}}{\color{blue}{TAA}}{\color{blue}{TCCTTCATAGGTTT}}$ GAACACTGTGTGTTTTTACCAAAGTGGCCATTGGCACTGTTTGCTTTTTTACAATCATGTGGACACAAGCATAAG

PCT/US2003/028547

1961/6881 FIGURE 1801

MDVLVSECSARLLQQEEEIKSLTAEIDRLKNCGCLGASPNLEQLQEENLKLKYRLNILRKSLQAERNKPTKNMIN IISRLQEVFGHAIKAAYPDLENPPLLVTPSQQAKFGDYQCNSAMGISQMLKTKEQKVNPREIAENITKHLPDNEC IEKVEIAGPGFINVHLRKDFVSEQLTSLLVNGVQLPALGENKKVIVDFSSPNIAKEMHVGHLRSTIIGESISRLF EFAGYDVLRLNHVGDWGTQFGMLIAHLQDKFPDYLTVSPPIGDLQVFYKESKKRFDTEEEFKKRAYQCVVLLQGK NPDITKAWKLICDVSRQELNKIYDALDVSLIERGESFYQDRMNDIVKEFEDRGFVQVDDGRKIVFVPGCSIPLTI VKSDGGYTYDTSDLAAIKQRLFEEKADMIIYVVDNGQSVHFQTIFAAAQMIGWYDPKVTRVFHAGFGVVLGEDKK KFKTRSGETVRLMDLLGEGLKRSMDKLKEKERDKVLTAEELNAAQTSVAYGCIKYADLSHNRLNDYIFSFDKMLD DRGNTAAYLLYAFTRIRSIARLANIDEEMLQKAARETKILLDHEKEWKLGRCILRFPEILQKILDDLFLHTLCDY IYELATAFTEFYDSCYCVEKDRQTGKILKVNMWRMLLCEAVAAVMAKGFDILGIKPVQRM

WO 2004/030615 PCT/US2003/028547

FIGURE 1802

CAGTTCACAGTGTTCATCAGGCGAGATACTTTTGGACCCACAAAGCCAGTTTTTTGGGGGGGATGCTCAGTGTCTA CCTGCAGTGCCAAAGTTTTGCTTGAACAGCCCTCTTCTGCCGCGCCTCCCAGCTCCACCCCCTATCACGTGGGTG CTGGCTGCTTCTGCGTGAGGAGCTTCCTCTGATCACCTGTAGCATCTTTAGTGCCTTCGTCCAGTCGGCCTGCAA ATCCCATTTCCCAGAGAGGCTTGGGCAGGGCCCACTTGCCACTTGGCCCTGTGCCCAGAGCGTTGGGGGCAGATG GCAGCCAGGGGAAGAAGGGAGGTGGGGAAGGGCCGCCACCGCTTGAGGGTCCCCTTGAGAGGAGGCCCCCAT GGCAGTTTTCCTGAGTTCTTGATCCACTTTGGTTTAAACAACTTTTGTGAAGCTATGTGAGATTTGACTGCATTT CAAAAGACAAAACACATGTTTTTTTCTGATTTGCTCTTTGCCTTTCAGCGACGCTTTCAGATACTTTGTGAGTGT TGCCCTGCCTTCCTCTAGGCAGAAAGTTTTCCTGCAAATGAAAGAATCTGCCATTCTCTTTTGCTATGATGATGA TGATTATTCTGACATGACCCGCGGGTACTGAAGCCACAGTCCTCTCTGTTCACTGTTCTCTCTTGAGTCATATC GGTGGCCAGTCACTCTCCTAGCTGTCCTTGCCTGGGGACTTAGATTTACCCCATCCAGGACTGTGGTCGCTATTC TGTGAGCGATTGATGGCGCATATGCAGAACTCCCCTGGAGTCATGGCTCTAGAAAGTGTCCAGGCCCATCGTGAC AATGGTGCCAAGCACCGGGCTGGTGACCAGTGCCTAAACACACGCTCCTTTAATCCTTACGGCAAGCCTGTGA GGCGGATAGGACCAGCCCTGATCTATAGTGAGAAAATTAAGGTTCAGAGGGAGAAGGTCCAAATAGTGGCCAAGC TGGGACTGAGATCTCGAGTTTGGGTTTGGTTTTGTTGTTGTTGTTCTTTCCCTCGTGTCCATGACTTTTCT CCCCCGCCCCTTGCTCACACATTTCAGTAGGTCACAGGCCAAATGGCAGCCCAAAAGGTGGGCAGAGATTTTTT TTTCTTCCCCTCACCCCTGCTTATTAACACAATTGTGACAACTACTTTACCTTACATCCCAGGGCAAACGGACAG CTTGCGGTACCTCCAAAAATTTGGAAAACCCTGAGTCTAAGACCACCTCTTGATAAAAGAGGCCTTTGCTCACAT GTTCTGCTCGGAATCTTTCTTTGCCATTGGTGGGTGTATGTCGTCCCAGCTGAGACTGCGGGAGAGCTGAGCTCC AGCTTAAACCGCTTTAATGGCCCTTCCCTACTGGGGGATCGCTGGAGCCCATGCCAGGTTACGGTAGTCATTTT AAACCTCTGCCACAAGGCCACGCCATAGAATCAATTTCCAAGTCAATGTTCTTGGCCCTAAAATGTTTGCGCCCA CTGAGGATTTCATTACCAGGTGGAAGATGGGGGAACATATGCCACGTTAAAGAGCAAGTGCTGAGTGTGCCAGGA GGGAAAAAGAAGAAACTGCTCCTGCCTTCCAGTAGCTGGCAACTTGACATCAAGAACAAAAACATTCGTAGCTGG ACCCCGTCCTTTCATCGTGCCCAAGTCTTACATGTTGGCTTAAGCTGCCCCCTTGGAGGCCGTACCTTTCTCTT TGGACTGTGACAGTGGACACCTAACAGCCTGAGCCATGTGTGGCTGTCTTATCCCCCAAGGGTTGTCCAGGCCCG TTCTGCAGGGCTGTTGTGTAGACTGCAGACATCCATACCTCACCACAGACCAAAGATGACCTCGTGTCAGACTGT GGGCTGATGAGAGGTAGAGCAGCATGCATCGAGGCCTGAGGGTGCAGGGCCCCTCTCTTGGCCTGGAGGAATTG CTCCTAACTAGAGTAAGTTTCCACGAGGGTCCCAGGCAGAGCTGCAGAGCTGGAACCGGAGGCTCCACAGTCCTT GCCTGCTCATGGACCTCCTTCAGAGCACCTTTCTACAGACTGGACTGCCCAGCTCCGTGGGGTGGCATCTGGTTT CTGGTGCTATTCTGCCAAGTTATCGAGCTCCTCCTCATGTTTCAACATTCCATCTTCCCGTTTCTATCCTCGACT CCAAAGTAAGCCTTCTTAGCTCCAATCAGGGATGAGGGGCTCAACCTCTTCTGTCCTCAAAGAGGCCAAACGCAG TGCCACAGTCGGTAGCCTTCACTTTTAGATGTCCTATTCATGTAAAAAAGAAGGTGCCCCCACCAGGCTTACATC AGCAATAAGCAATTCTAATGCAACGATGGTGTCCACATTTTACCCCAGTGTGTGCCCATGTATGCCTTTGTGCCC GTGTAATTATTGTTAGCGCCCCTTTCACTTAGAGGGGTGATGATAAACTGTGGCCACCTTGATTACAACCCACAT CTCGTGTCTGCTCATAGGATGACGCTGGAGATCCCCACACTTACTCTACCCTCTTGGCAAATTGGCATTCCGGTG CTGGTTTCAAGCTTCATCATG

WO 2004/030615 PCT/US2003/028547

1963/6881 FIGURE 1803

 ${\tt TACCTAAGTGCGTGCCGCCACCCG} \underline{{\tt ATG}} {\tt GAAGATTCGATGGACATGGACATGAGCCCCCTGAGGCCCCAGAACTAT}$ CTTTTCGGTTGTGAACTAAAGGCCGACAAAGATTATCACTTTAAGGTGGATAATGATGAAAATGAGCACCAGTTA TCTTTAAGAACGGTCAGTTTAGGGGCTGGTGCAAAGGATGAGTTGCACATTGTTGAAGCAGAGGCAATGAATTAC GAAGGCAGTCCAATTAAAGTAACACTGGCAACTTTGAAAATGTCTGTACAGCCAACGGTTTCCCTTGGGGGCTTT GAAATAACACCACCAGTGGTCTTAAGGTTGAAGTGTGGTTCAGGGCCAGTGCATATTAGTGGACAGCACTTAGTA GCTGTGGAGGAGATGCAGAGTCAGAAGATGAAGAGGAGGAGGATGTGAAACTCTTAAGTATATCTGGAAAGCGG TCTGCCCCTGGAGGTGGTAGCAAGGTTCCACAGAAAAAAGTAAAACTTGCTGCTGATGAAGATGATGACGATGAT AAGAAATCTATACGAGATACTCCAGCCAAAAATGCACAAAAGTCAAATCAGAATGGAAAAGACTCAAAACCATCA TCAACACCAAGATCAAAAGGACAAGAATCCTTCAAGAAACAGGAAAAAACTCCTAAAACACCAAAAGGACCTAGT TCTGTAGAAGACATTAAAGCAAAAATGCAAGCAAGTATAGAAAAAGGTGGTTCTCTCCCAAAGTGGAAGCCAAA TTCATCAATTATGTGAAGAATTGCTTCCGGATGACTGACCAAGAGGCTATTCAAGATCTCTGGCAGTGGAGGAAG ${\tt TCTCTT} \underline{{\tt TAA}}{\tt GAAAATAGTTTAAAACAATTTGTTAAAAAAATTTTCCGTCTTATT|{\tt TCATTTCTGTAACAGTTGATATC}$ TGGCTGTCCTTTTTATAATGCAGAGTGAGAACTTTCCCTACCGTGTTTGATAAATGTTGTCCAGGTTCTATTGCC AAGAATGTGTTGTCCAAAATGCCTGTTTAGTTTTTAAAGATGGAACTCCACCCTTTGCTTGGTTTTAAGTATGTA TGGAATGTTATGATAGGACATAGTAGTAGCGGTGGTCAGACATGGAAATGGTGGGGAGACAAAAATACACATGT6

PCT/US2003/028547

1964/6881 FIGURE 1804

PCT/US2003/028547

FIGURE 1805

GGGCGCCCCAATGGGCTGCGCGGAGCGTCACTTCCCGGCAGCGGGAGGCGAGTGGCGAGTGGCGAGTGGCGAG $\texttt{CGGCCGGCTGGCCTGCAGCGCCCCGGCGGCGCACG} \underline{\textbf{ATG}} \texttt{CCCTTTGACTTCAGGAGGTTTGACATCT}$ ACAGGAAGGTGCCCAAGGACCTTACGCAGCCAACGTACACCGGGGCCATTATCTCCATCTGCTGCTGCTCTTCA TCCTCTTCCTCTCCTCTCGGAGCTCACCGGATTTATAACGACAGAAGTTGTGAACGAGCTCTATGTCGATGACC GGCTTGACATTCAGGATGAGATGGGCAGGCACGAAGTGGGCCACATCGACAACTCCATGAAGATCCCGCTGAACA GTGCCACAGCCCAGACACAGACCCAGACATGACGCATGTCATCCACAAGCTCTCCTTTGGGGACACGCTACAGG ACTACATCCTGAAGATTGTGCCCACGGTTTATGAGGACAAGAGTGGCAAGCAGCGGTACTCCTACCAGTACACGG TGGCCAACAAGGAATACGTCGCCTACAGCCACACGGGCCGCATCATCCCTGCAATCTGGTTCCGCTACGACCTCA GCCCCATCACGGTCAAGTACACAGAGAGACGGCAGCCGCTGTACAGATTCATCACCACGATCTGTGCCATCATTG GCGGGACCTTCACCGTCGCCGCATCCTGGACTCATGCATCTTCACAGCCTCTGAGGCCTGGAAGAAGATCCAGC $\tt TGGGCAAGATGCAT{\underline{\tt TGA}} \tt CGCCACACCCAGCCTAATGGCCGAGGACCCTGGGCATCGCCAGCCTTGCCTCCAGTGC$ CCTGTCTCCTTTGGCCCTCAATCTGGTCCCAAATCTGGCTGTGTCCCAAAGGGTGTGTGGGAAGTGGGGGGAAAG TAGAGGATGGCTCGATGTTTTGCAGCTACCTCTTTTCCCCGTGTTTCTTTTTAGACAAATTACACTGCCTGAAGT TGCAGTTCCCCTTTCCCTGGGGAGCCCCAAGAACAGAGTCAGGCAAGGGGTGGGGAGTCCAGGGGAACATCCCAG AATGCATATCGATCAGCTCTCAGCCAGGCTTCGACAATCTCGCAGCCCCCACTAGGTGGACACATTAATGATTTG GTTTCTCCCCTGGGCAGCCAACCTGCCCCAGAGGCACCAGACCTGGGCTTTCAGCTTTGGGACCAGGCTGCCCAA TCTGAGGACATAGGGGATGTCAGTTTCCTATGGAAGAGACACCTCTGACCCGTTATTCTTATAATCAAAATCTGA AGGGAAAAAATGTTTTAGTTCTTTCCCCACTCGTTGGGTTCAACTAGATTAAAAGGCTGATTTTCAG

PCT/US2003/028547

FIGURE 1806

MPFDFRRFDIYRKVPKDLTQPTYTGAIISICCCLFILFLFLSELTGFITTEVVNELYVDDPDKDSGGKIDVSLNI SLPNLHCELVGLDIQDEMGRHEVGHIDNSMKIPLNNGAGCRFEGQFSINKVPGNFHVSTHSATAQPQNPDMTHVI HKLSFGDTLQVQNIHGAFNALGGADRLTSNPLASHDYILKIVPTVYEDKSGKQRYSYQYTVANKEYVAYSHTGRI IPAIWFRYDLSPITVKYTERRQPLYRFITTICAIIGGTFTVAGILDSCIFTASEAWKKIQLGKMH

PCT/US2003/028547

FIGURE 1807

PCT/US2003/028547

FIGURE 1808A

GAAGCCGCCCATCCCGCCCAAGTGGAGGAAGAGTATTACACCATCGCCGAATTCCAGACAACCATCCCAGACGG CATCAGCTTCCAGGCAGGCCTGAAGGTCGAGGTGATCGAGAAAAACTTGAGTGGCTGGTGGTACATTCAGATTGA AGATAAGGAAGGGTGGGCCCCGGCCACCTTCATTGACAAGTACAAGAAGACGAGCAACGCGTCGAGACCCAACTT TCTGGCTCCCCTGCCCACGAGGTGACCCAGCTCCGGCTGGGGGAAGCAGCAGCGCTGGAGAACAACACGGGCAG CGAAGCCACGGGCCCCTCCCGGCCCTGCCTGACGCACCGCATGGTGTCATGGACTCGGGGTTGCCATGGTCTAA AGACTGGAAGGCAGTAAGGATGTCCTGAGGAAGGCATCTTCAGACATGTCTGCGTCAGCAGGCTACGAGGAGAT CTCAGACCCCGACATGGAGGAGAAGCCCAGCCTCCCTCCGCGGAAAGAATCCATCATCAAGTCGGAGGGGGAGCT GCTGGAGCGGGAGCGGCAGAGGACGGAGCAGCTCCGGGGCCCCACTCCCAAGCCTCCGGGCGTGATTTT GCCGATGATGCCAGCCAAACACCCTCCAGCCCGGGACAGCAGGAGGCCAAAACCTGACAAAAGCAG ACTGTTCCAGCTGAAAAATGACATGGGGCTGGAGTGTGGCCAAGGTCTTGGCCAAGGAAGTGAAGAAGCCCAA CCTCCGGCCCATCTCCAAATCCAAAACTGACCTGCCAGAGGAGAAGCCAGATGCCACTCCCCAGAATCCCTTCTT GAAGTCCAGACCTCAGGTTAGGCCAAAACCAGCTCCTTCCCCCAAAACGGAGCCACCTCAGGGCGAAGACCAAGT CGACATCTGCAACCTCAGGAGTAAGCTCAGGCCTGCCAAGTCCCAAGACAAGTCCTTGTTGGATGGGGAGGGCCC CCAGGCAGTAGGGGGCCAAGACGTGGCCTTCAGCCGAAGCTTCCTCCCAGGAGAGGGGCCCTGGCCGCCCCAGGA AGATCCTGTGTCTAAGAGCGTGCCTGTTCCTCTCCAAGAGGCTCCCCAGCAGAGACCTGTGGTCCCACCCCGCAG ACCACCTCCCCAAAGAAAACCTCTTCGTCATCCAGGCCGCTCCCAGAGGTCAGAGGTCACAGTGTGAAGGCCA CGAAAGCAGGCAGCTCCCACCCAGGCCGTGCTCTCCTCGTCCCTCCAAAAGCCAAACCTTTTCTCTCCAACTC TTTGGGGGGCCAGGATGACACGCGAGGCAAAGGCAGCCTGGGGCCATGGGGGACCGGCAAGATTGGAGAAAACAG GGAGAAAGCAGCTGCAGCCTCTGTCCCCAATGCCGACGGCCTGAAGGACTCTTTGTATGTGGCCGTGGCCGACTT TGAAGGAGACAAAGACACCAGCAGCTTCCAGGAAGGGACAGTGTTTGAAGTCCGGGAGAAGAACAGCAGTGGCTG **GTAG**CCGACTCCCTTTCTGCCTAGAGGGCCCGCTGGTCCTTGCTGGCTTTACCCACGTATTTAATACGCCTCTTA ATTTATCATTCTCCACGCAGCTTCCAAGGCAGACTCTGGGGTACTGTGACTTCTTGCCTCCCATGGGTGGA GAGTGAGTTTCGGACACCTCGGGCCCCTGGGCCTGATCCCTCCTATCACAGCATCACTGGAGGCTCAGAACCC ACAGCCTTTGCTTTCTGTCCATGTCAGCATCCCTGCCTTAAGAGAACTCCTCCTGGCCAATGGCATTGCCACCCA GCAGTGGGACCAAGACTCTCCAAGACCTCCAGGACTGGATCCCATTGCCTGGAGAAACTCCAGCAAGGGTCTCTC ATGGCTTGGACATGGCACAGTAAGGGGCAGCCAACCCAGTCCATGATGACTTTTTGCTCCAACTTCTTCATGTTTC TAAAAGCCCAGTGGCTTTATTCACTCCTCCTAAATTGCCTGCTACCAGAAGGAACTTCATCCTGAAGAAATGCAT TCCATTACCAGTTCCAGGGAAAGTGTCCCCTTCCCCAAAGCCTCAGGCCCGTGGGCCTCTGAGGTTCCACTGGAT GCGGCTCCCCAGGAGTGGGCCTGGAGATCCGCTCAGCCGCCCTGCCTCCCACCTTCTATCTTGGGACCGTGGTC AGCCCTGAAGGGTGGTTCCAGCCCCGCGTATGCTGCGCTTTTGCTGCTGCAGGCTCCGGTCCCTCCAGGGCTTTTC TAAGAGGCCCATTCACAAGTCGTGCCCTTGTGAGCACCCCTTTGCTGAGTGCCTCGTGGGTGCCAAACACTGTAC TTGGCGCTTTGCATTCATGCTTTGACCCTCACAACCTCCCTTTATAGATGAGGAAATTCACGCTCCATGTGCCCA CCTCTGTAAAAGACAAACCAGGCAGGGAAGAGATAGAAGCTGGCTAAGTGGTGGCCAAGTGGCTTCATTGTGAGG GGGGTGAGGGGGCATTCGTGGCTGCTCCCACACCCACCATCCCTCCAGCCCACAGCAGCCTATACCAAAGGCTGC CCTGGACTCAACAGCTGCATCTCCATGACAGGAGAATGCCAGGGTCCTGGTGGTTGACACAGAGCCCTGTTCCCT CTTCTAAGCTGTTGCCCCCTGGGGAATAGAGCTTATGGAGCAACGGGAGCTGAGGTGGCCTCGAGGGCCAGCCTG GAGGGCTCTGAGCATAGCATGCAGCGGTCCCATAGGGAGGCAGGTAACCAAGGGCCAGGCAGAGCTGCTTCCTGT GCCTCTCCGGCATTTGTAATGTTTTTTTTTTTTTCACGCACTGCCAAATCTGTTTTCTCCCTTGAAGAAACCCA GGGCAGATGTGGTCATCTGTCAAACTGAGGTCTGGAGAGGCATGACTAAATCACTGCAGAAGCAAAATCAGGACC CTGCCCTGCCCTGCCCCACCCTGCCCTGCCCAGAGATCTCCAGTTCACAGTGTTCATCAGGCGA GATACTTTTGGACCCACAAAGCCAGTTTTTTGGGGGGGATGCTCAGTGTCTACCTGCAGTGCCAAAGTTTTGCTTG AACAGCCCTCTTCTGCCGCGCCCCCAGCTCCACCCCCTATCACGTGGGTGCTGCTTCTGCGTGAGGAGCT TCCTCTGATCACCTGTAGCATCTTTAGTGCCTTCGTCCAGTCGGCCTGCAAATCCCATTTCCCAGAGAGGCTTGG

PCT/US2003/028547

1969/6881 FIGURE 1808B

GCAGGGCCCACTTGCCACTTGGCCCTGTGCCCAGAGCGTTGGGGGCAGATGGCAGCCAGGGGAAGAAGGGAGGTG GGGAAGGCCCCCCCTTGAGAGGAGGCCCCATGCCATTTTCCTGAGTTCTTGATC CACTTTGGTTTAAACAACTTTTGTGAAGCTATGTGAGATTTGACTGCATTTCAAAAGACAAAACACATGTTTTTT TCTGATTTGCTCTTTGCCTTTCAGCGACGCTTTCAGATACTTTGTGAGTGTCTACTCTGTGCTAGGTGCTGAGTA GACTGGGATGTGTGTGGCTCCATCCCTGGCTGGAAGAGCTTTGAGTCCTGTCTGCTGACTTCACTGAAGGAGTTT CTCTCTTGCTTCATTCCTTCCCCGGGGGTCAGCTGGGTAGGAGCAGACTTGCCCTGCCTTCCTCTAGGCAGAA AGTTTTCCTGCAAATGAAAGAATCTGCCATTCTCTTTTGCTATGATGATGATGATTATTCTGACATGACCCGCGG GTACTGAAGCCACAGTCCTCTGTTCACTGTTCTCTCTTGAGTCATATCTATGGCCTGAGGACGTCTGTATCC TCCTTGCCTGGGGACTTAGATTTACCCCATCCAGGACTGTGGTCGCTATTCTGTGAGCGATTGATGGCGCATATG CAGAACTCCCCTGGAGTCATGGCTCTAGAAAGTGTCCAGGCCCATCGTGACAATGGTGCCAAGCACCGGGCTGGT GACCAGTGCCTAAACACACGCCCCCTTTAATCCTTACGGCAAGCCTGTGAGGCGGATAGGACCAGCCCTGATCT ATAGTGAGAAAATTAAGGTTCAGAGGGAGAAGGTCCAAATAGTGGCCAAGCTGGGACTGAGATCTCGAGTTTGGG TTTGTTTGTTTGTTGTTGTTCTTTCCCTCGTGTCCATGACTTTTCTCTGCCATTAGCAGGGAAGTGTGCG GAGGGCTTCCAGGGAATCAAGTGACCCTCCCTCTGAATTTCGGTGCCTCTTCCCCCCGCCCCTTGCTCACACATT TAACACAATTGTGACAACTACTTTACCTTACATCCCAGGGCAAACGGACAGCTTGCGGTACCTCCAAAAATTTGG CATTGGTGGGTGTATGTCGTCCCAGCTGAGACTGCGGGAGAGCTGAGCTCCAGCTTAAACCGCTTTTAATGGCCC TTCCCTACTGGGGGATCGCTGGAGCCCATGCCAGGTTACGGTAGTCATTTTAAACCTCTGCCACAAGGCCACGCC ATAGAATCAATTTCCAAGTCAATGTTCTTGGCCCTAAAATGTTTGCGCCCACTGAGGATTTCATTACCAGGTGGA AGATGGGGGAACATATGCCACGTTAAAGAGCAAGTGCTGAGTGTGCCAGGACTTGAGAAGGACCTTAGGCTGAGG AGTGGACAGTCTGGTATTTATTTCGCCTCTCCCAAGTACCCAGCACAGAGTGGGAAAAAGAAACTGCTCCTG CCTTCCAGTAGCTGGCAACTTGACATCAAGAACAAAAACATICGTAGCTGGACCCCCGTCCTTTCATCGTGCCCA AGTCTTACATGTTGGCTTAAGCTGCCCCCTTGGAGGCCGTACCTTTCTCTTTTGGACTGTGACAGTGGACACCTAA $\tt CAGCCTGAGCCATGTGTGGCTGTCTTATCCCCCAAGGGTTGTCCAGGCCCGTTCTGCAGGGCTGTTGTGTAGACT$ GCAGACATCCATACCTCACCACAGACCAAAGATGACCTCGTGTCAGACTGTGGGCTGATGAGAGGTAGAGCAGCA TGCATCGAGGCCTGAGGGTGCAGGGCGCCCTCTCTTGGCCTGGAGGAATTGCTCCTAACTAGAGTAAGTTTCCAC GAGGGTCCCAGGCAGAGCTGCAGACCTGGAACCGGAGGCTCCACAGTCCTTGCCTGCTCATGGACCTCCTTCAGA GCACCTTTCTACAGACTGGACTGCCCAGCTCCGTGGGGTGGCATCTGGTTTCTGGTGCTATTCTGCCAAGTTATC GAGCTCCTCCTCATGTTTCAACATTCCATCTTCCCGTTTCTATCCTCGACTCCAAAGTAAGCCTTCTTAGCTCCA ATCAGGGATGAGGGCTCAACCTCTTCTGTCCTCAAAGAGGCCAAACGCAGTGCCACAGTCGGTAGCCTTCACTT TTAGATGTCCTATTCATGTAAAAAAGAAGGTGCCCCCACCAGGCTTACATCAGCAATAAGCAATTCTAATGCAAC GATGGTGTCCACATTTTACCCCAGTGTGTGCCCATGTATGCCTTTGTGCCCGTGTAATTATTGTTAGCGCCCCTT TCACTTAGAGGGGTGATGATAAACTGTGGCCACCTTGATTACAACCCACATTTCCTGCTTTGGGGAGCTTCCAAG TAACAGGCCATTTCTTACCTCCCTCCAGGAACAGTGGGCACTGCCCACCACCTCGTGTCTGCTCATAGGATGACG CTGGAGATCCCCACACTTACTCTACCCTCTTGGCAAATTGGCATTCCGGTGGTGGTTTTTTGTTTCCTTTAACACA TTAAATAAATGAGTATATAGGATGTGAGGGGAGGGGTGAGAACAACTAGCTGTAGCATGTGTAGGCTATATACTT TACCATTTGACTTCTTTTCTTTTTTTTTTTAAATAAAAAAGTGCTTGACTGGTTTCAAGCTTCATCATG

PCT/US2003/028547

1970/6881 FIGURE 1809

MDSGLPWSKDWKGSKDVLRKASSDMSASAGYEEISDPDMEEKPSLPPRKESIIKSEGELLERERERQRTEQLRGP
TPKPPGVILPMMPAKHIPPARDSRRPEPKPDKSRLFQLKNDMGLECGHKVLAKEVKKPNLRPISKSKTDLPEEKP
DATPQNPFLKSRPQVRPKPAPSPKTEPPQGEDQVDICNLRSKLRPAKSQDKSLLDGEGPQAVGGQDVAFSRSFLP
GEGPGRAQDRTGKQDGLSPKEISCRAPPRPAKTTDPVSKSVPVPLQEAPQQRPVVPPRRPPPPKKTSSSSRPLPE
VRGPQCEGHESRAAPTPGRALLVPPKAKPFLSNSLGGQDDTRGKGSLGPWGTGKIGENREKAAAASVPNADGLKD
SLYVAVADFEGDKDTSSFQEGTVFEVREKNSSGWWFCQVLSGAPSWEGWIPSNYLRKKP

PCT/US2003/028547

1971/6881 FIGURE 1810

TTGGCTGATTGCAATTCTGGCCCAACTCAACCCTCTCTTTTGGACCGCAATTGAAAAATGAAACCATCTGGTATCT
GAAGTATCATTGGCCTTGAGGAAGAAGACATGCTCTACAGTGCTCAGTCTTTGAGGTCACGAGAAGAAGAATGCCT
TCTAGATGCAAAATCACCTCCAAACCAGACCACTTTTCTTGACTTGCCTGTTTTTGGCCATTAGCTGCCTTAAACG
TTAACAGCACATTTGAATGCCTTATTCTACAATGCAGCGTGTTTTCCTTTGCCTTTTTTTGCACTTTGGTGAATTA
CGTGCCTCCATAACCTGAACTGTGCCGACTCCACAAAACGATTATGTACTCTTCTGAGATAGAAGATGCTGTTCT
TCTGAGAGATACGTTACTCTCTCTTGGAATCTGTGGATTTGAAGATGGCTCCTGCCTTCTCACGTGGGAATCAG
TGAAGTGTTTAGAAACTGCTGCAAGACAAACAAGACTCCAGTGGGGTGGTCAGTAGGAGAGACCGTTCAGAGGGA
AGAGCCATCTCAACAGAATCGCACCAAACTATACTTTCAGGATGAATTTCTTCTTCTTCTGCCATCTTTTGGAATAA
ATATTTTCCTCCTTTCTATGGA

PCT/US2003/028547

1972/6881 FIGURE 1811

GTCCCCAACATGGCGGCTCCCCAAGACGTCCACGTCCGGATCTGTAACCAAGAGATTGTCAAATTTGACCTGGAG GTGAAGGCGCTTATTCAGGATATCCGTGATTGTTCAGGACCCTTAAGTGCTCTTACTGAACTGAATACTAAAGTA ACATTTTTTTTTAAGCTAACTTATTCCCTGACAGACTTTTCTTCAACTCAGCATGACTTCAACTCTCCAACTACA CCTGTTACCTTCAGTGACCTGGAGCAGTTGGCTAAAGAGCAAGACAACAACAACAACAACTTCTACTCCAG GAAGTGGAGAATCACAAAAAGCAGATGCTCAGCAATCAGGCCTCATGGAGGAAAGCTAATCTCACCTGCAAAATT GCAATCGACAATCTAGAGAAAGCAGAACTTCTTCAGGGAGGAGATCTCTTAAGGCAAAGGAAAACCACCAAAGAG AGCCTGGCCCAGACATCCAGTACCATCACTGAGAGCCTCATGGGGATCAGCAGGATGATGGCCCAGCAGGTCCAG ATGTCGGGCACCATCCAGCTGGGCCGGAAGCTTATCACAAAATACAATCGCCGGGAGCTGACGGACAAGCTTCTC ATCTTCCTTGCGCTAGCCCTGTTTCTTGCTACGGTCCTCTATATTGTGAAAAAGCGGCTCTTTCCATTTTTGTGA GATCCCAAAGGTGCCAGTTCTGGCCCTTTCAGCTCCTGTTTCAGGATCTGTCCTGGTTCCTGAGCTCTAGGCTGC CAAGTAGCTGGCTTGTAAAGGGTGAACAGAGCCATGGGAGGAAGGTCTGGCATTGGGATGCCGCCCTGGGGACAT ACGAACCGCCTCCTTCCACCATTGTGCACTATGGGAGGCCGCTGCTGCGTGGAGCACTTAAAGTCCAGCCTCCAG GTAGGAAGAAGGTGATGAAAACTCCTGGTCATTCCTTGAATAAA

PCT/US2003/028547

1973/6881 FIGURE 1812

GAGGAGGAGGAAAAGGCAAAAAGGAAGAGTGGGAGGAGGAGGGAAGCGGCGAAGGAGGAAGAGGAGGAG GAGGAAGAGGGGAGCACAAAGGATCCAGGTCTCCCGACGGGAGGTTAATACCAAGAACCATCTGTGCCGAGCGGC CCGAGGGTCCCCAAGACAGGAGCTCCCAGCAGAAAGGCCGCCTGTCCCTGCAGAATACAGCGGAGATCCAGCACT GTTTGGTCAACGCTGGCGATGTGGGGGTGTGGCGTGTTTGAATGTTTCGAGAACAACTCTTGTGAGATTCGGGGCT CCTTGAAATGTAAGGCCCACGCTCTGCGGCACAGGTTCGGCTGCATAAGCCGGAAGTGCCCGGCCATCAGGGAAA TGGTGTCCCAGTTGCAGCGGGAATGCTACCTCAAGCACGACCTGTGCGCGGCTGCCCAGGAGAACACCCGGGTGA TAGTGGAGATGATCCATTTCAAGGACTTGCTGCTGCACGAACCCTACGTGGACCTCGTGAACTTGCTGCTGACCT GTGGGGAGGAGGTGAAGGAGGCCATCACCCACAGCGTGCAGGTTCAGTGTGAGCAGAACTGGGGAAGCCTGTGCT CCATCTTGAGCTTCTGCACCTCGGCCATCCAGAAGCCTCCCACGGCGCCCCCGAGCGCCCAGGTGGACA GAACCAAGCTCTCCAGGGCCCACCACGGGGAAGCAGGACATCACCTCCCAGAGCCCAGCAGTAGGGAGACTGGCC GAGGTGCCAAGGGTGAGCGAGGTAGCAAGAGCCACCCAAACGCCCATGCCCGAGGCAGAGTCGGGGGCCTTGGGG $\tt CTCAGGGACCTTCCGGAAGCAGCGAGTGGGAAGACGAACAGTCTGAGTATTCTGATATCCGGAGG\underline{TGA}{AATGAAA}$ GGCCTGGCCACGAAATCTTTCCTCCACGCCGTCCATTTTCTTATCTATGGACATTCCAAAACATTTACCATTAGA TGAGATGGAGACCCCTGGGGGCCGTGGGGTCTCAGGGGTGCCTGGTGAATTCTGCACTTACACGTACTCAAGGGAG CGCGCCCGCGTTATCCTCGTACCTTTGTCTTCTTTCCATCTGTGGAGTCAGTGGGTGTCGGCCGCTCTGTTGTGG GGGAGGTGAACCAGGGAGGGGCAGGGCAAGGCAGGGCCCCCAGAGCTGGGCCACACAGTGGGTGCTGGGCCTCGC CCCGAAGCTTCTGGTGCAGCCTCTGGTGCTGTCTCCGCGGAAGTCAGGGCGGCTGGATTCCAGGACAGGAGT GAATGTAAAAATAAATATCGCTTAGAATGCAGGAGAAGGGTGGAGAGGAGGAGGCAGGGGCCGAGGGGGTGCTTGGTG TTTCTATGTGTAATTTCTGAGCCATTGTACTGTCTGGGCTGGGGGGGACACTGTCCAAGGGAGTGGCCCCTATGA CAGCCCATCCTTTGAGGCTGATTTTTCTTTTTTTTAAGTTCTATTTTAAAAGCTATCAAACAGCGACATAGCCAT ACATCTGACTGCCTGACATGGACTCCTGCCCACTTGGGGGAAACCTTATACCCAGAGGAAAATACACACCTGGGG AGTACATTTGACAAATTTCCCTTAGGATTTCGTTATCTCACCTTGACCCTCAGCCAAGATTGGTAAAGCTGCGTC CTGGCGATTCCAGGAGACCCAGCTGGAAACCTGGCTTCTCCATGTGAGGGGATGGGAAAGGAAAGAAGAAGAATGA AGACTACTTAGTAATTCCCATCAGGAAATGCTGACCTTTTACATAAAATCAAGGAGACTGCTGAAAATCTCTAAG GGACAGGATTTTCCAGATCCTAATTGGAAATTTAGCAATAAGGAGGGGGGGCCAAAGGGGACAAATAAAGGCAGAG

PCT/US2003/028547

1974/6881 FIGURE 1813

MCAERLGQFMTLALVLATFDPARGTDATNPPEGPQDRSSQQKGRLSLQNTAEIQHCLVNAGDVGCGVFECFENNS CEIRGLHGICMTFLHNAGKFDAQGKSFIKDALKCKAHALRHRFGCISRKCPAIREMVSQLQRECYLKHDLCAAAQ ENTRVIVEMIHFKDLLLHEPYVDLVNLLLTCGEEVKEAITHSVQVQCEQNWGSLCSILSFCTSAIQKPPTAPPER QPQVDRTKLSRAHHGEAGHHLPEPSSRETGRGAKGERGSKSHPNAHARGRVGGLGAQGPSGSSEWEDEQSEYSDIRR

WO 2004/030615 PCT/US2003/028547

1975/6881 FIGURE 1814

PCT/US2003/028547

1976/6881 FIGURE 1815

MAVPAAAMGPSALGQSGPGSMAPWCSVSSGPSRYVLGMQELFRGHSKTREFLAHSAKVHSVAWSCDGRRLASGSF DKTASVFLLEKDRLVKENNYRGHGDSVDQLCWHPSNPDLFVTASGDKTIRIWDVRTTKCIATVNTKGENINICWS PDGQTIAVGNKDDVVTFIDAKTHRSKAEEQFKFEVNEISWNNDNNMFFLTNGNGCINILSYPELKPVQSINAHPS NCICIKFDPMGKYFATGSADALVSLWDVDELVCVRCFSRLDWPVRTLSFSHDGKMLASASEDHFIDIAEVETGDK LWEVQCESPTFTVAWHPKRPLLAFACDDKDGKYDSSREAGTVKLFGLPNDS

PCT/US2003/028547

1977/6881 FIGURE 1816

PCT/US2003/028547

1978/6881 FIGURE 1817

PCT/US2003/028547

1979/6881 FIGURE 1818

GGAAGATGAGGACGACGAGGACTACGTGCCCTATGTGCCGTTACGGCAGCGCCGGCAGCTACTGCTCCAGAAGCT GCTGCAGCGAAGACGCAAGGGAGCTGCGGAGGAAGAGCAGCAGGACAGCGGTAGTGAACCCCGGGGAGATGAGGA CGACATCCCGCTAGGCCCTCAGTCCAACGTCAGCCTCCTGGATCAGCACCAGCACCTTAAAGAGAAGGCTGAAGC GCGCAAAGAGTCTGCCAAGGAGAAGCAGCTGAAGGAAGAAGAAGAAGATCCTGGAGAGTGTTGCCGAGGGCCGAGC ATTGATGTCAGTGAAGGATGGCTAAGGGCATTACGTATGATGACCCCATCAAAACCAGCTGGACTCCACCCCG TATCCCACCACCATCAAGAGCTTCAAGGAAATGAAGTTTCCTGCAGCCATCCTGAGAGGCCTGAAGAAGAAAGG CATTCACCACCCAACACCCATTCAGATCCAGGGCATCCCCACCATTCTATCTGGCCGTGACATGATAGGCATCGC TTTCACGGGTTCAGGCAAGACACTGGTGTTCACGTTGCCCGTCATCATGTTCTGCCTGGAACAAGAGAAGAGGGTT ACCCTTCTCAAAGCGCGAGGGGCCCTATGGACTCATCTCTCCCCTCGCGGGAGCTGGCCCGGCAGACCCATGG CATCCTGGAGTACTACTGCCGCCTGCTGCAGGAGGACAGCTCACCACTCCTGCGCTGCGCCCTCTGCATTGGGGG CATGTCCGTGAAAGAGCAGATGGAGACCATCCGACACGGTGTACACATGATGGTGGCCACCCCGGGGCGCCTCAT GGATTTGCTGCAGAAGAAGATGGTCAGCCTAGACATCTGTCGCTACCTGGCCCTGGACGAGGCTGACCGCATGAT CGACATGGGCTTCGAGGGTGACATCCGTACCATCTTCTCCTACTTCAAGGGCCAGCGACAGACCCTGCTCTTCAG TGCCACCATGCCGAAGAAGATTCAGAACTTTGCTAAGAGTGCCCTTGTAAAGCCTGTGACCATCAATGTGGGGCG CGCTGGGGCTGCCAGCCTGGATGTCATCCAGGAGGTAGAATATGTGAAGGAGGAGGCCAAGATGGTGTACCTGCT CGAGTGCCTGCAGAAGACACCCCCGCCTGTACTCATCTTTGCAGAGAAGAAGGCAGACGTGGACGCCATCCACGA CGAGGCATTCCGGGAGGGCAAGAAGGATGTCCTAGTAGCCACAGACGTTGCCTCCAAGGGCCTGGACTTCCCTGC CATCCAGCACGTCATCAATTATGACATGCCAGAGGAGATTGAGAACTATGTACACCGGATTGGCCGCACCGGGCG CTCGGGAAACACAGGCATCGCCACTACCTTCATCAACAAAGCGTGTGATGAGTCAGTGCTGATGGACCTCAAAGC GCTGCTGCTAGAAGCCAAGCAGAAGGTGCCGCCCGTGCTGCAGGTGCTGCATTGCGGGGATGAGTCCATGCTGGA TATGCAGACCAAGCAGGTCAGCAACATCGGTCGCAAGGACTACCTGGCCCACAGCTCCATGGACTTCTGAGCCGA CAGTCTTCCCTTCTCCAAGAGGCCTCAGTCCCCAAGACTGCCACCAGTCTACACATACAGCAGCCCCCTGGAC AGAATCAGCATTTCAGCTCAGCTGGCCTGGGATGGGCCAGGCTGGTCCTGGCTGCCTGTTCCCTGTGCTCTTCAG AATTACTGTTTTTGTTTCCTTTTACCCCAGCTGCCATTAAAGCCCAAACCTCTAGCCC

PCT/US2003/028547

FIGURE 1819

PCT/US2003/028547

FIGURE 1820

GCCTCCGCCCCCGCGGACCCTCCGCGGTACACCTTGCACCCAGCGTCTCCCTCTACAAGACGGCCCGGCCCT TTGGTGCGCCCCGCCGCTGACAGCGCCCCGCAGCAGAATGGACAGCCGCTCCGACCGCTGGTCCCAGATGCCA TCCTTGCCCACCTCACAGGCACCGAGTTCATGCAAGACCCGGATGAGGAGCACCTGAAGAAATCAAGCCAGGTGC CCAGCCGCCCTGGGCTGTGGACCCTGCGTTTGCCGAGCGCTATGCCCCGGACAAACGAGCACAGTGCTGA TGCCAGGAGGGGGCAGCAACACGGCAAGACTCCCGTGTGTCACCAGTGCCACAAGGTCATCCGGGGCCGCTACC TGGTGGCGCTGGGCCACGCGTACCACCCGGAGGAGTTTGTGTGTAGCCAGTGTGGGAAGGTCCTGGAAGAGGGTG GCTTCTTTGAGGAGAAGGGCGCCATCTTCTGCCCACCATGCTATGACGTGCGCTATGCACCCAGCTGTGCCAAGT GCAAGAAGAAGATTACAGGCGAGATCATGCACGCCCTGAAGATGACCTGGCACGTGCACTGCTTTACCTGTGCTG AGATGTTTGGCACGAAATGCCATGGCTGTGACTTCAAGATCGACGCTGGGGACCGCTTCCTGGAGGCCCTGGGCT AGGACAGGCCTCTCTGCAAGAGCCATGCCTTCTCTCATGTGTGAGCCCCTTCTGCCCACAGCTGCCGCGGTGGCC CCTAGCCTGAGGGGCCTGGAGTCGTGGCCCTGCATTTCTGGGTAGGGCTGGCAATGGTTGCCTTAACCCTGGCTC GCACACCGGTGCTGGCCACACCAGCCCCCTTTCACCTCCAGTGCCACAATAAACCTGTACCCAGCTG

PCT/US2003/028547

1982/6881 FIGURE 1821

AGGTGGAGCAAGATGGCTGTGGAGCTGGGCGTGCTCCTCCTCCGGCCCCGGCCCGGAACCGGGCTGGGTAGAGTG AAGAAGTGCTTTATTGAGGAGATCCCGGACGAGGCCATGGTCATAGGAAACTACCGGACGCAGCTGTATGACAAG CAGCGGGAGGAGTACCAGCCGGCCACCCCGGGGCTTGGCATGTTTGTGGAGGTGAAGGACCCAGAGGACAAGGTC ATCCTGGCCCGGCAGTATGGCTCCGAGGGCAGGTTCACTTCCCATACCCCTGGTGAGCACCAGATCTGT GTGGAACAAGTGGAGCAGATCCAGAAAGAGCAGAACTACCAGCGGTGGCGAGAGGAGCGCTTCCGGCAGACCAGT GAGAGCACCAACCAGCGGGTGCTGTGGTGGTCCATTCTGCAGACCCTCATCCTCGTGGCCATCGGTGTCTGGCAG GGCTGGGGGAGAAAGGACCTCCTGGAACTGACTTCTTCTGTCAGGAGGACTGGTTTCCAGCCATACCTGTTCTGG AAGGGAGAGGGCTGGAGGCACCCACAGGCACAAGCTGAAGGCAGCTTGGCTAATACTGAGCAGGTAGTGGG GCAAATTCCTGCCCTCTCTCTGGCCTCTGGGCCGTTTGGTAGTAATCACCCAGGGGCTGGTAAAGCCCCTCCT CAGGCAAGCCAGTCTTCTGTCTTCCTTTGCTAACTTAGGGTTTTGAGCAGGTTGGGGGTATGGTGCCTGTCATACC CACCTGCCACCCTGGGAACCTCACTGTTCTCTTTCAGCCTAGACCTGCTGATCCAGGGTGTGTGAGTTGAG GGTGGGTGGAGGGGTTTGCAGTGTGGGGAATGTGGCCCTGCAGTTGACCTGAGCTGCTTCACATGGTTGTCCATTC TGGGGCTTAAAGAACTGGGACCAGACCAAGTAGAGGCCTTGGTGCTGGTTGGGGTGGGGCCTGCAGAGTCTTAGT

PCT/US2003/028547

1983/6881 FIGURE 1822

MRTLLLVLWLATRGSALYFHIGETEKKCFIEEIPDETMVIGNYRTQLYDKQREEYQPATPGLGMFVEVKDPEDKV ILARQYGSEGRFTFTSHTPGEHQICLHSNSTKFSLFAGGMLRVHLDIQVGEHANDYAEIAAKDKLSELQLRVRQL VEQVEQIQKEQNYQRWREERFRQTSESTNQRVLWWSILQTLILVAIGVWQMRHLKSFFEAKKLV

PCT/US2003/028547

1984/6881 FIGURE 1823

GGAAGATGAGGACGACGAGGACTACGTGCCCTATGTGCCGTTACGGCAGCGCCGGCAGCTACTGCTCCAGAAGCT GCTGCAGCGAAGACGCAAGGGAGCTGCGGAGGAAGAGCAGCAGGACAGCGGTAGTGAACCCCGGGGAGATGAGGA CGACATCCCGCTAGGCCCTCAGTCCAACGTCAGCCTCCTGGATCAGCACCAGCACCTTAAAGAGAAGGCTGAAGC GCGCAAAGAGTCTGCCAAGGAGAAGCAGCTGAAGGAAGAAGAAGATCCTGGAGAGTGTTGCCGAGGGCCGAGC ATTGATGTCAGTGAAGGAGATGGCTAAGGGCATTACGTATGATGACCCCATCAAAACCAGCTGGACTCCACCCCG TATCCCACCACCATCAAGAGCTTCAAGGAAATGAAGTTTCCTGCAGCCATCCTGAGAGGCCTGAAGAAGAAAGG CATTCACCACCCAACACCCATTCAGATCCAGGGCATCCCCACCATTCTATCTGGCCGTGACATGATAGGCATCGC TTTCACGGGTTCAGGCAAGACACTGGTGTTCACGTTGCCCGTCATCATGTTCTGCCTGGAACAAGAGAAGAGGTT ACCCTTCTCAAAGCGCGAGGGGCCCTATGGACTCATCATCTGCCCCTCGCGGGAGCTGGCCCGGCAGACCCATGG CATCCTGGAGTACTACTGCCGCCTGCTGCAGGAGGACAGCTCACCACTCCTGCGCTGCGCCCTCTGCATTGGGGG CATGTCCGTGAAAGAGCAGATGGAGACCATCCGACACGGTGTACACATGATGGTGGCCACCCCGGGGCCCCCAT GGATTTGCTGCAGAAGAAGATGGTCAGCCTAGACATCTGTCGCTACCTGGCCCTGGACGAGGCTGACCGCATGAT CGACATGGGCTTCGAGGGTGACATCCGTACCATCTTCTCCTACTTCAAGGGCCAGCGACAGACCCTGCTCTTCAG TGCCACCATGCCGAAGAAGATTCAGAACTTTGCTAAGAGTGCCCTTGTAAAGCCTGTGACCATCAATGTGGGGCG $\tt CGCTGGGGCTGCCAGCCTGGATGTCATCCAGGAGGTAGAATATGTGAAGGAGGGCCAAGATGGTGTACCTGCT$ CGAGTGCCTGCAGAAGACACCCCCGCCTGTACTCATCTTTGCAGAGAAGAAGGCAGACGTGGACGCCATCCACGA CGAGGCATTCCGGGAGGGCAAGAAGGATGTCCTAGTAGCCACAGACGTTGCCTCCAAGGGCCTGGACTTCCCTGC CATCCAGCACGTCATCAATTAIGACATGCCAGAGGAGATTGAGAACTATGTACACCGGATTGGCCGCACCGGGCG CTCGGGAAACACAGGCATCGCCACTACCTTCATCAACAAAGCGTGTGATGAGTCAGTGCTGATGGACCTCAAAGC GCTGCTGCTAGAAGCCAAGCAGAAGGTGCCGCCCGTGCTGCAGGTGCTGCATTGCGGGGATGAGTCCATGCTGGA TATGCAGACCAAGCAGGTCAGCAACATCGGTCGCAAGGACTACCTGGCCCACAGCTCCATGGACTTCTGAGCCGA CAGTCTTCCCTTCTCCCAAGAGGCCTCAGTCCCCAAGACTGCCACCAGTCTACACATACAGCAGCCCCCTGGAC AGAATCAGCATTTCAGCTCAGCTGGCCTGGAATGGGCCAGGCTGGTCCTGGCTGCCTGTTCCCTGTGCTCTTCAG AATTACTGTTTTTGTTTCCTTTTACCCCAGCTGCCATTAAAGCCCCAAACCTCTAGCCC

PCT/US2003/028547

1985/6881 FIGURE 1824

CTTCAAAGTAGTGCTGGAGGGCCAGCACCTTGGGGCTTCCGGCTGCAAGGGGCAAGGACTTCAATGTGCCCCT CGATGGCGAGAATGCGGGTAGCCTCACACACATCGAAGCTCAGAACAAGATCCGGGCCTGCGGGGAGCGCCTCAG CCTGGGCCTCAGCAGGGCCCAGCCGGTTCAGAGCAAACCGCAGAAGGCCTCCGCCCCCCCGCCGCGGACCCTCCGCG CCCGCAGCAGAATGGACAGCCGCTCCGACCGCTGGTCCCAGATGCCAGCAGCAGCAGCGGCTGATGGAGAACACAGA CATGCAAGACCCGGATGAGGAGCACCTGAAGAAATCAAGCCAGGTGCCCAGGACAGAAGCCCCAGCCCCAGCCTC GCCGCTGCAGAGCCGCACCTCCATTGTGCAGGCAGCTGCCGGAGGGGTGCCAGGAGGGGGGCAACAACGGCAA GACTCCCGTGTGTCACCAGTGCCACAAGGTCATCCGGGGCCGCTACCTGGTGGCGCTGGGCCACGCGTACCACCC GGAGGAGTTTGTGTGTAGCCAGTGTGGGAAGGTCCTGGAAGAGGGTGGCTTCTTTGAGGAGAAGGGCGCCATCTT CTGCCCACCATGCTATGACGTGCGCTATGCACCCAGCTGTGCCAAGTGCAAGAAGAAGAATTACAGGCGAGATCAT GCACGCCCTGAAGATGACCTGGCACGTGCACTGCTTTACCTGTGCTGCCAAGACGCCCCATCCGGAACAGGGC CTTCTACATGGAGGAGGGCGTGCCCTATTGCGAGCGAGACTATGAGAAGATGTTTGGCACGAAATGCCATGGCTG TGACTTCAAGATCGACGCTGGGGACCGCTTCCTGGAGGCCCTGGGCTTCAGCTGGCATGACACCTGCTTCGTCTG TGCGATATGTCAGATCAACCTGGAAGGAAAGACCTTCTACTCCAAGAAGGACAGGCCTCTCTGCAAGAGCCATGC CCTGCATTTCTGGGTAGGGCTGGCAATGGTTGCCTTAACCCTGGCTCCTGGCCCGAGCCTGGGGCTCCCTGGGCC CTTTCACCTCCAGTGCCACAATAAACCTGTACCCAGCTG

PCT/US2003/028547

1986/6881 FIGURE 1825

MDSFKVVLEGPAPWGFRLQGGKDFNVPLSISRLTPGGKAAQAGVAVGDWVLSIDGENAGSLTHIEAQNKIRACGE RLSLGLSRAQPVQSKPQKASAPAADPPRYTFAPSVSLNKTARPFGAPPPADSAPQQNGQPLRPLVPDASKQRLME NTEDWRPRPGTGQSRSFRILAHLTGTEFMQDPDEEHLKKSSQVPRTEAPAPASSTPQEPWPGPTAPSPTSRPPWA VDPAFAERYAPDKTSTVLTRHSQPATPTPLQSRTSIVQAAAGGVPGGGSNNGKTPVCHQCHKVIRGRYLVALGHA YHPEEFVCSQCGKVLEEGGFFEEKGAIFCPPCYDVRYAPSCAKCKKKITGEIMHALKMTWHVHCFTCAACKTPIR NRAFYMEEGVPYCERDYEKMFGTKCHGCDFKIDAGDRFLEALGFSWHDTCFVCAICQINLEGKTFYSKKDRPLCK SHAFSHV

PCT/US2003/028547

FIGURE 1826

GGGGGCGCGCCCCGCGCCTCCAGCCCAGCGCTCGGAGCCGCTTTCGCTGCCACTGTCTGCTCCCCCGGGCCGC CGCCGCCTCCCCCGCAGGCCCGGGGCTCTGTCCGCTGGGCCCGCGCTGCTCGCCCCGGGCCAGGAGAACGAGCT CGAGGAGGATGCCTGGGCCCGGTGCAAGGTTCCCCCTCTCACCCGCAGCTGTGGAGAGGAGGAAGCGGAACTAGA TCACGTGCTTCGCCGGCTTCTGGCTCATCTGGGGTCTCATCGTCCTGCTCTGCTGCTCTTCTGCAGCTTCCTGCGCC GCCGCCTCAAACGGCGCCAGGAGGAGCGACTGCGCGAGCAGAACCTGCGCGCCCTAGAGCTGGAGCCCCTCGAAC TCGAGGGCAGTCTGGCCGGGAGTCCCCCGGGCCTGGCGCCGCCGCACCACCACCACCGTAGCCGCCTGGAGG CGCCGGCTCACGCGCACTCGCACGTGCACGTGCACCGCTGCTGCACCACGGGCCCGCGCAGCCGCACG CGCACGCGCACCCACACCGCACCACGCGCTCCCGCACCCGCCTACGCACCTGTCGGTGCCGCCACGGC CCTGGAGCTACCCGCGCCAAGCGGAATCGGACATGTCCAAACCACCGTGTTACGAAGAGGCGGTGCTGATGGCAG GTCGCCGCGACAGCGCGGAGAAGCAGGAGCAGCCGCCTCCCAGCTACAAGCCGCTCTTCCTGGACCGGGGCTACA GCCGCCGGGTCTTCCCCAGCTGGACCGACTCAGAGCTCAGCAGCCGCGAGCCCCTGGAGCACGGAGCTTGGCGTC AAAAAAAAA

PCT/US2003/028547

1988/6881 FIGURE 1827

MVMSQGTYTFLTCFAGFWLIWGLIVLLCCFCSFLRRRLKRRQEERLREQNLRALELEPLELEGSLAGSPPGLAPP QPPPHRSRLEAPAHAHSHPHVHVHPLLHHGPAQPHAHAHPHPHHHALPHPPPTHLSVPPRPWSYPRQAESDMSKP PCYEEAVLMAEPPPPYSEVLTDTRGLYRKIVTPFLSRRDSAEKQEQPPPSYKPLFLDRGYTSALHLPSAPRPAPP CPALCLQADRGRRVFPSWTDSELSSREPLEHGAWRLPVSIPLFGRTTAV

PCT/US2003/028547

1989/6881 FIGURE 1828

CCTGCTGGTGAGCTTGGAGTCAACACTTTCGATTCCACCTTGGGAAGCCCCCAAGGAGCATAAGTACAAAGCTGA AGAGCACACAGTCGTTCTCACTGTCACCGGGGAGCCCTGCCACTTCCCCTTCCAGTACCACCGGCAGCTGTACCA CAAATGTACCCACAAGGGCCGGCCAGGCCCTCAGCCCTGGTGTGCTACCACCCCCAACTTTGATCAGGACCAGCG ATGGGGATACTGTTTGGAGCCCAAGAAAGTGAAAGACCACTGCAGCAAACACAGCCCCTGCCAGAAAGGAGGGAC CTGTGTGAACATGCCAAGCGGCCCCCACTGTCTCTGTCCACAACACCTCACTGGAAACCACTGCCAGAAAGAGAA CAGATGCCAGTGCAAGGGTCCTGATGCCCACTGCCAGCGGCTGGCCAGGCCTGCCGCACCAACCCGTGCCT CCATGGGGGTCGCTGCCTAGAGGTGGAGGGCCACCGCCTGTGCCACTGCCCGGTGGGCTACACCGGACCCTTCTG CGACGTGGACACCAAGGCAAGCTGCTATGATGGCCGCGGGCTCAGCTACCGCGGCCTGGCCAGGACCACGCTCTC GGGTGCGCCCTGTCAGCCGTGGGCCTCGGAGGCCACCTACCGGAACGTGACTGCCGAGCAAGCGCGGAACTGGGG ACTGGGCGGCCACGCCTTCTGCCGGAACCCGGACAACGACATCCGCCCGTGGTGCTTCGTGCTGAACCGCGACCG GCTGAGCTGGGAGTACTGCGACCTGGCACAGTGCCAGACCCCAACCCAGGCGGCGCCTCCGACCCCGGTGTCCCC TAGGCTTCATGTCCCACTCATGCCCGCGCAGCCGGCACCGCCGAAGCCTCAGCCCACGACCCGGACCCCGCCTCA GTCCCAGACCCCGGGAGCCTTGCCGGCGAAGCGGGAGCAGCCGCCTTCCCTGACCAGGAACGGCCCACTGAGCTG CGGGCAGCGGCTCCGCAAGAGTCTGTCTTCGATGACCCGCGTCGTTGGCGGGCTGGTGGCGCTACGCGGGGCGCA CCCCTACATCGCCGCGCTGTACTGGGGCCACAGTTTCTGCGCCGGCAGCCTCATCGCCCCCTGCTGGGTGCTGAC GGCCGCTCACTGCCTGCAGGACCGGCCCGCACCCGAGGATCTGACGGTGGTGCTCGGCCAGGAACGCCGTAACCA CAGCTGTGAGCCGTGCCAGACGTTGGCCGTGCGCTCCTACCGCTTGCACGAGGCCTTCTCGCCCGTCAGCTACCA GCACGACCTGGCTCTGTTGCGCCTTCAGGAGGATGCGGACGGCAGCTGCGCGCTCCTGTCGCCTTACGTTCAGCC GGTGTGCCTGCCAAGCGGCGCCGCGCGACCCTCCGAGACCACGCTCTGCCAGGTGGCCGGCTGGGGCCACCAGTT CGAGGGGGGGGAGGATATGCCAGCTTCCTGCAGGAGGCGCAGGTACCGTTCCTCTCCCTGGAGCGCTCCAGC CCCGGACGTGCACGGATCCTCCATCCTCCCGGCATGCTCTGCGCAGGGTTCCTCGAGGGCGGCACCGATGCGTG ${\tt CCAGGGTGATTCCGGAGGCCCGCTGGTGTGTGAGGACCAAGCTGCAGAGCGCCGGCTCACCCTGCAAGGCATCAT}$ CAGCTGGGGATCGGGCTGTGGTGACCGCAACAAGCCAGGCGTCTACACCGATGTGGCCTACTACCTGGCCTGGAT $\texttt{CCGGGAGCACCGTTTCC} \underline{\textbf{TGA}} \texttt{TTGCTCAGGGACTCATCTTTCCCTCCTTGGTGATTCCGCAGTGAGAGAGTGGC}$ TGGGGCATGGAAGGCAAGATTGTGTCCCCATTCCCCCAGTGCGGCCAGCTCCGCGCCAGGATGGCGAGGAACTCAA TAAAGTGCTTTGAAAATGCTGAG

PCT/US2003/028547

FIGURE 1829

MRALLLLGFLLVSLESTLSIPPWEAPKEHKYKAEEHTVVLTVTGEPCHFPFQYHRQLYHKCTHKGRPGPQPWCAT
TPNFDQDQRWGYCLEPKKVKDHCSKHSPCQKGGTCVNMPSGPHCLCPQHLTGNHCQKEKCFEPQLLRFFHKNEIW
YRTEQAAVARCQCKGPDAHCQRLASQACRTNPCLHGGRCLEVEGHRLCHCPVGYTGPFCDVDTKASCYDGRGLSY
RGLARTTLSGAPCQPWASEATYRNVTAEQARNWGLGGHAFCRNPDNDIRPWCFVLNRDRLSWEYCDLAQCQTPTQ
AAPPTPVSPRLHVPLMPAQPAPPKPQPTTRTPPQSQTPGALPAKREQPPSLTRNGPLSCGQRLRKSLSSMTRVVG
GLVALRGAHPYIAALYWGHSFCAGSLIAPCWVLTAAHCLQDRPAPEDLTVVLGQERRNHSCEPCQTLAVRSYRLH
EAFSPVSYQHDLALLRLQEDADGSCALLSPYVQPVCLPSGAARPSETTLCQVAGWGHQFEGAEEYASFLQEAQVP
FLSLERCSAPDVHGSSILPGMLCAGFLEGGTDACQGDSGGPLVCEDQAAERRLTLQGIISWGSGCGDRNKPGVYT
DVAYYLAWIREHTVS

PCT/US2003/028547

1991/6881 FIGURE 1830

ATGGCGGCGGAAGGCTGGATTTGGCGTTGGGGCTGGGGCCGGCGGTGCCTGGGAAGGCCTGGGCTTCTCGGCCCC AGTGAACATCTCAAGCGGGAGCATTCGCTCATTAAGCCCTACCAAGGGGTCGGTTCCAGCTCTATGCCCCTCTGG GACTTCCAGGGCAGCACTATGCTCACGAGCCAGTACGTCTGACCCCTGACGAGCGCAGCAAAGAGGGCTCT ATCTGGAACCACCAGCCGTGCTTCCTCAAAGACTGGGAAATGCACGTCCACTTCAAAGTCCACGGCACAGGGAAG AAGAACCTCCATGGAGACGGCATCGCCTTGTGGTACACCCGGGACCGCCTCGTGCCAGGGCCTGTGTTTGGAAGC AAAGATAACTTCCACGGCTTAGCCATCTTCCTGGACACCTACCCCAATGATGAGACCACTGAGCGCGTGTTCCCG TACATCTCGGTGATGGTGAACAATGGCTCCCTGTCCTACGACCACAGCAAGGATGGGCGCTGGACCGAGCTGGCG GGCTGCACGGCTGACTTCCGCAACCGCGATCACGACACCTTCCTGGCTGTGCGCTACTCCCGGGGCCGTCTGACG GTGATGACCGACCTGGAGGACAAGAACGAGTGGAAGAACTGCATTGACATCACGGGAGTGCGCCTGCCCACCGGC TACTACTTCGGGGCCTCCGCCGGCACCGGCGACCTGTCTGACAATCATGACATCATCTCCATGAAGCTGTTCCAG CTGATGGTGGAGCACACGCCCGACGAGAGAGAGCATCGACTGGACCAAGATCGAGCCCAGCGTCAACTTCCTCAAG TCGCCCAAAGACAACGTGGACGACCCCACGGGGAACTTCCGCAGCGGGCCCCTGACGGGGTGGCGGGTGTTCCTG $\tt CGGAACAAGCGCTTCTAC{\color{red}{TGA}} GTGGCGCCTCCGGCGGGGCCTGTCCCTGGGCCCAGGAGCCAATGTGAACTTTTT$ TCATACATTTTGCTTCTTGCCCAGCAGGGACAGGTGGCAGAGCCGAGGCTTAGGGTCTGGCACCCCCCACAGCTG GAGACGGAGGCTCTCCTGGGGCTGTCTCAGGAGCAGGGGTCTGTGTCTACAGATGGGCTGTGGCCCCTGCAG GCAGCTGTTGAACACTGGAGGGTCCCCCGGACCACACTGGGGTGGGCTCCTGAGGAC

PCT/US2003/028547

1992/6881 FIGURE 1831

MAAEGWIWRWGWGRRCLGRPGLLGPGPGPTTPLFLLLLLGSVTADITDGNSEHLKREHSLIKPYQGVGSSSMPLW DFQGSTMLTSQYVRLTPDERSKEGSIWNHQPCFLKDWEMHVHFKVHGTGKKNLHGDGIALWYTRDRLVPGPVFGS KDNFHGLAIFLDTYPNDETTERVFPYISVMVNNGSLSYDHSKDGRWTELAGCTADFRNRDHDTFLAVRYSRGRLT VMTDLEDKNEWKNCIDITGVRLPTGYYFGASAGTGDLSDNHDIISMKLFQLMVEHTPDEESIDWTKIEPSVNFLK SPKDNVDDPTGNFRSGPLTGWRVFLLLLCALLGIVVCAVVGAVVFQKRQERNKRFY

PCT/US2003/028547

1993/6881 FIGURE 1832

PCT/US2003/028547

1994/6881 FIGURE 1833

MEPLASNIQVLLQAAEFLERREREAEHGYASLCPHRSPGPIHRRKKRPPQAPGAQDSGRSVHNELEKRRRAQLKR CLERLKQQMPLGADCARYTTLSLLRRARMHIQKLEDQEQRARQLKERLRSKQQSLQRQLEQLRGLAGAAERERLR ADSLDSSGLSSERSDSDQEELEVDVESLVFGGEAELLRGFVAGQEHSYSHGGGAWL

PCT/US2003/028547

1995/6881 FIGURE 1834

CAACTCATGGCGGCGGCGGCGGCGGCGGCAGCTGCTTGGGCGCGGTGGTGACTGAGCTACGAGCCTGGCG GCGGGTGTGCGCCGAGCCCGGCCCGGCCCGGCCCTCGCGTGCCTCCCAGGCTCCGCACCCCTGATGCTGCGCGG AAGTGTTCGCCGCCTTCTGGCAGCGGTACCCGAATCCCTATAGCAAACATGTCTTGACGGAAGACATAGTACACC GGGAGGTGACCCCTGACCAGAAACTGCTGTCCCGGCGACTCCTGACCAAGACCAACAGGATGCCACGCTGGGCCG AGCGACTATTTCCTGCCAATGTTGCTCACTCGGTGTACGTCCTGGAGGACTCTATTGTGGACCCACAGAATCAGA CCATGACTACCTTCACCTGGAACATCAACCACGCCCGGCTGATGGTGGTGGAGGAACGATGTGTTACTGTGTGA ACTCTGACAACAGTGGCTGGACTGAAATCCGCCGGGAAGCCTGGGTCTCCTAGCTTATTTGGTGTCTCCAGAG CTGTCCAGGAATTTGGTCTTGCCCGGTTCAAAAGCAACGTGACCAAGACTATGAAGGGTTTTGAATATATCTTGG CGGCACTGGCAGCTACAGAGAAGGCCAAGGACCTCGCCAGCAAGGCGCCCCAAGAAGCAGCAGCAGCAAC ${\tt AGTTTGTG} \underline{\textbf{TAG}} \texttt{CCAGTCTACCACCACCACCACCACAGCACCCCAGACAGCTAGGCCTTAGCCCCTCTGCCCTTCATTG}$ TACTTTATCATTAAAAATCAACTTCCAGCCCTGTCTGCTGTCTACGTGGTGGGGTTGTGGGGATGCAGTTTGGCAT CTGCAGTACACCAAGCACATGATTCATGTCTGAGCCAGGTCTGCTTATTCTCCCATTGGGCAGCTGAGGACCGAG GCACAGAGGTGCGGTGACTTGCCCGGGGCTCCAGGTAGCCTGCAGGTTAACTGGCGGTAAGTGCTAGACTGTAAG $\tt CCCGACAAGGGCAGGGCTTTTGGTTTTGTTCTCTGATGTGTCTCAGTATCTAGCACATAATAGACACTCAATAAA$ TACTTGTTGAATTCAAA

PCT/US2003/028547

1996/6881 FIGURE 1835

 $\begin{matrix} MVKYFLGQSVLRSSWDQVFAAFWQRYPNPYSKHVLTEDIVHREVTPDQKLLSRRLLTKTNRMPRWAERLFPANVA\\ HSVYVLEDSIVDPQNQTMTTFTWNINHARLMVVEERCVYCVNSDNSGWTEIRREAWVSSSLFGVSRAVQEFGLAR\\ FKSNVTKTMKGFEYILAKLQGEAPSKTLVETAKEAKEKAKETALAATEKAKDLASKAATKKQQQQQQFV \end{matrix}$

PCT/US2003/028547

1997/6881 FIGURE 1836

GCGGAGGAGCCAGGTGAGGAGGCCAGGAAGGCAGTTGGTGGGAAGTCCAGCTTGGGTCCCTGAGAGCTGTGAG GCCTCTGAGGAAGTGGAGCTTGAGCCCTGCCTGGCTCCCAGCCTGGAGCAGCAAGAGCAGGAGCTGACAGTAGCC CTTGGGCAGCCTGTGCGGCTGTGCTGTGGGCGGGCTGAGCGTGGCCACTGGTACAAGGAGGGCAGTCGCCTG GCACCTGCTGGCCGTGTACGGGGCTGGAGGGGCCGCCTAGAGATTGCCAGCTTCCTACCTGAGGATGCTGGCCGC TACCTCTGCCTGGCACGAGGCTCCATGATCGTCCTGCAGAATCTCACCTTGATTACAGGTGACTCCTTGACCTCC TGGACACACCCCAGCGCATGGAGAAGAAACTGCATGCAGTACCTGCGGGGAACACCGTCAAGTTCCGCTGTCCA GCTGCAGGCAACCCCACGCCCACCATCCGCTGGCTTAAGGATGGACAGGCCTTTCATGGGGAGAACCGCATTGGA GGCATTCGGCTGCGCCATCAGCACTGGAGTCTCGTGATGGAGAGCGTGGTGCCCTCGGACCGCGGCACATACACC TGCCTGGTAGAGAACGCTGTGGGCAGCATCCGCTATAACTACCTGCTAGATGTGCTGGAGCGGTCCCCGCACCGG CCCATCCTGCAGGCCGGGCTCCCGGCCAACACCCACAGCCGTGGTGGGCAGCGACGTGGAGCTGCTGTGCAAGGTG TACAGCGATGCCCAGCCCCACATCCAGTGGCTGAAGCACATCGTCATCAACGGCAGCAGCTTCGGAGCCGACGGT TTCCCCTATGTGCAAGTCCTAAAGACTGCAGACATCAATAGCTCAGAGGTGGAGGTCCTGTACCTGCGGAACGTG TCAGCCGAGGACGCAGGCGAGTACACCTGCCTCGCAGGCAATTCCATCGGCCTCTCCTACCAGTCTGCCTGGCTC ACGGTGCTGCCAGAGGAGGACCCCACATGGACCGCAGCAGCCCCGAGGCCAGGTATACGGACATCATCCTGTAC GCGTCGGGCTCCCTGGCTGTGCTCCTGCTGCTGGCCGGGCTGTATCGAGGGCAGGCGCTCCACGGCCGG CACCCCGCCCGCCCGCCACTGTGCAGAAGCTCTCCCGCTTCCCTCTGGCCCGACAGTTCTCCCTGGAGTCAGGC $\tt CTCGTGAGTCTAGATCTACCTCTCGACCCACTATGGGAGTTCCCCCGGGACAGGCTGGTGCTTGGGAAGCCCCTA$ GGCGAGGGCTGCTTTGGCCAGGTAGTACGTGCAGAGGCCTTTGGCATGGACCCTGCCCGGCCTGACCAAGCCAGC ACTGTGGCCGTCAAGATGCTCAAAGACAACGCCTCTGACAAGGACCTGGCCGACCTGGTCTCGGAGATGGAGGTG ATGAAGCTGATCGGCCGACACAAGAACATCATCAACCTGCTTGGTGTCTGCACCCAGGAAGGGCCCCTGTACGTG ATCGTGGAGTGCGCCGCCAAGGGAAACCTGCGGGAGTTCCTGCGGGCCCCGGCCCCCAGGCCCCGACCTCAGC CCCGACGGTCCTCGGAGCAGTGAGGGGCCGCTCTCCTTCCCAGTCCTGGTCTCCTGCGCCTACCAGGTGGCCCGA GGCATGCAGTATCTGGAGTCCCGGAAGTGTATCCACCGGGACCTGGCTGCCCGCAATGTGCTGGTGACTGAGGAC AATGTGATGAAGATTGCTGACTTTGGGCTGGCCCGCGGCGTCCACCACATTGACTACTATAAGAAAACCAGCAAC TCTTTTGGGATCCTGCTATGGGAGATCTTCACCCTCGGGGGCTCCCCGTATCCTGGCATCCCGGTGGAGGAGCTG TTCTCGCTGCTGCGGGAGGGACATCGGATGGACCGACCCCCACACTGCCCCCAGAGCTGTACGGGCTGATGCGT GAGTGCTGGCACGCAGCGCCCTCCCAGAGGCCTACCTTCAAGCAGCTGGTGGAGGCGCTGGACAAGGTCCTGCTG GCCGTCTCTGAGGAGTACCTCGACCTCCGCCTGACCTTCGGACCCTATTCCCCCTCTGGTGGGGACGCCAGCAGC ACCTGCTCCAGCGATTCTGTCTTCAGCCACGACCCCCTGCCATTGGGATCCAGCTCCTTCCCCTTCGGGTCT ${\tt GGGGTGCAGACA}{{\tt TGA}}{\tt GCAAGGCTCAAGGCTGTGCAGGCACATAGGCTGGTGGCCTTGGGCCTTGGGGCTCAGCCA$ CAGCCTGACACAGTGCTCGACCTTGATAGCATGGGGCCCCTGGCCCAGAGTTGCTGTGCCGTGTCCAAGGGCCGT GCCCTTGCCCTTGGAGCTGCCGTGCCTGTGTCCTGATGGCCCAAATGTCAGGGTTCTGCTCGGCTTCTTGGACCA ACCAGCAGGAGGTTCTGGGCCTCTGAACCCCCTTTCCCCACACCTCCCCTGCTGCTGCCCCAGCGTCTTGA CGGGAGCATTGGCCCCTGAGCCCAGAGAAGCTGGAAGCCTGCCGAAAACAGGAGCAAATGGCGTTTTATAAATTA TTTTTTTGAAATAAA

PCT/US2003/028547

1998/6881 FIGURE 1837

MRLLLALLGVLLSVPGPPVLSLEASEEVELEPCLAPSLEQQEQELTVALGQPVRLCCGRAERGGHWYKEGSRLAP AGRVRGWRGRLEIASFLPEDAGRYLCLARGSMIVLQNLTLITGDSLTSSNDDEDPKSHRDLSNRHSYPQQAPYWT HPQRMEKKLHAVPAGNTVKFRCPAAGNPTPTIRWLKDGQAFHGENRIGGIRLRHQHWSLVMESVVPSDRGTYTCL VENAVGSIRYNYLLDVLERSPHRPILQAGLPANTTAVVGSDVELLCKVYSDAQPHIQWLKHIVINGSSFGADGFP YVQVLKTADINSSEVEVLYLRNVSAEDAGEYTCLAGNSIGLSYQSAWLTVLPEEDPTWTAAAPEARYTDIILYAS GSLALAVLLLLAGLYRGQALHGRHPRPPATVQKLSRFPLARQFSLESGSSGKSSSSLVRGVRLSSSGPALLAGLV SLDLPLDPLWEFPRDRLVLGKFLGEGCFGQVVRAEAFGMDPARPDQASTVAVKMLKDNASDKDLADLVSEMEVMK LIGRHKNIINLLGVCTQEGPLYVIVECAAKGNLREFLRARRPPGPDLSPDGPRSSEGPLSFPVLVSCAYQVARGM QYLESRKCIHRDLAARNVLVTEDNVMKIADFGLARGVHHIDYYKKTSNGRLPVKWMAPEALFDRVYTHQSDVWSFGILLWEIFTLGGSPYPGIPVEELFSLLREGHRMDRPPHCPPELYGLMRECWHAAPSQRPTFKQLVEALDKVLLAV SEEYLDLRLTFGPYSPSGGDASSTCSSSDSVFSHDPLPLGSSSFPFGSGVQT

PCT/US2003/028547

1999/6881 FIGURE 1838

GCGGAGGAGCCAGGTGAGGAGCCAGGAAGGCAGTTGGTGGGAAGTCCAGCTTGGGTCCCTGAGAGCTGTGAG GCCTCTGAGGAAGTGGAGCTTGAGCCCTGCCTGGCTCCCAGCCTGGAGCAGCAAGAGCAGGAGCTGACAGTAGCC CTTGGGCAGCCTGTGCGGCTGTGGGCGGGCTGAGCGTGGTGGCCACTGGTACAAGGAGGGCAGTCGCCTG GCACCTGCTGGCCGTGTACGGGGCTGGAGGGGCCGCCTAGAGATTGCCAGCTTCCTACCTGAGGATGCTGGCCGC TACCTCTGCCTGGCACGAGGCTCCATGATCGTCCTGCAGAATCTCACCTTGATTACAGGTGACTCCTTGACCTCC TGGACACACCCCCAGCGCATGGAGAAGAAACTGCATGCAGTACCTGCGGGGAACACCGTCAAGTTCCGCTGTCCA GCTGCAGGCAACCCCACGCCCACCATCCGCTGGCTTAAGGATGGACAGGCCTTTCATGGGGAGAACCGCATTGGA GGCATTCGGCTGCGCCATCAGCACTGGAGTCTCGTGATGGAGAGCGTGGTGCCCTCGGACCGCGGCACATACACC TGCCTGGTAGAGAACGCTGTGGGCAGCATCCGCTATAACTACCTGCTAGATGTGCTGGAGCGGTCCCCGCACCGG CCCATCCTGCAGGCCGGGCTCCCGGCCAACACCCACAGCCGTGGTGGGCAGCGACGTGGAGCTGCTGTGCAAGGTG TACAGCGATGCCCAGCCCCACATCCAGTGGCTGAAGCACATCGTCATCAACGGCAGCAGCTTCGGAGCCGACGGT TTCCCCTATGTGCAAGTCCTAAAGACTGCAGACATCAATAGCTCAGAGGTGGAGGTCCTGTACCTGCGGAACGTG TCAGCCGAGGACGCAGGCGAGTACACCTGCCTCGCAGGCAATTCCATCGGCCTCTCCTACCAGTCTGCCTGGCTC TCCTCCAGCGGCCCCGCCTTGCTCGCCGGCCTCGTGAGTCTAGATCTACCTCTCGACCCACTATGGGAGTTCCCC ATGGACCCTGCCCGGCCTGACCAAGCCAGCACTGTGGCCGTCAAGATGCTCAAAGACAACGCCTCTGACAAGAC $\tt CTGGCCGACCTGGTCTCGGAGATGGAGGTGATGAAGCTGATCGGCCGACACAAGAACATCATCAACCTGCTTGGT$ GTCTGCACCCAGGAAGGGCCCCTGTACGTGATCGTGGAGTGCGCCGCCAAGGGAAACCTGCGGGAGTTCCTGCGG GCCCGGCGCCCCCAGGCCCCGACCTCAGCCCCGACGTCCTCGGAGCAGTGAGGGGCCGCTCTCCCTTCCCAGTC CTGGTCTCCTGCGCCTACCAGGTGGCCCGAGGCATGCAGTATCTGGAGTCCCGGAAGTGTATCCACCGGGACCTG GCTGCCCGCAATGTGCTGGTGACTGAGGACAATGTGATGAAGATTGCTGACTTTGGGCTGGCCCGCGGCGTCCAC CGGGTGTACACACACAGAGTGACGTGTGGTCTTTTGGGATCCTGCTATGGGAGATCTTCACCCTCGGGGGCTCC TGCCCCCAGAGCTGTACGGGCTGATGCGTGAGTGCTGGCACGCAGCGCCCTCCCAGAGGCCTACCTTCAAGCAG CTGGTGGAGGCGCTGGACAAGGTCCTGCTGGCCGTCTCTGAGGAGTACCTCGACCTCCGCCTGACCTTCGGACCC TATTCCCCCTCTGGTGGGGACGCCAGCAGCACCTGCTCCTCCAGCGATTCTGTCTTCAGCCACGACCCCCTGCCA $\tt TTGGGATCCAGCTCCTTCCGGTCTGGGGTGCAGACA\underline{TGA}_{GCAAGGCTCAAGGCTGTGCAGGCACATAGG$ $\tt CTGGTGGCCTTGGGGCTCAGCCACAGCCTGACACAGTGCTCGACCTTGATAGCATGGGGCCCCTGGCC$ CAGAGTTGCTGTGCCGTGTCCAAGGGCCGTGCCCTTGCCCTTGGAGCTGCCGTGCCTGTGTCCTGATGGCCCAAA GCTGCTATGCTAAACCTCCTGCCTCCCAATACCAGCAGGAGGTTCTGGGCCTCTGAACCCCCTTTCCCCACACCT $\tt CCCCCTGCTGCTGCCCCAGCGTCTTGACGGGAGCATTGGCCCCTGAGCCCAGAGAAGCTGGAAGCCTGCCGA$ AAACAGGAGCAAATGGCGTTTTATAAATTATTTTTTTGAAATAAA

PCT/US2003/028547

2000/6881 FIGURE 1839

MRLLLALLGVLLSVPGPPVLSLEASEEVELEPCLAPSLEQQEQELTVALGQPVRLCCGRAERGGHWYKEGSRLAP AGRVRGWRGRLEIASFLPEDAGRYLCLARGSMIVLQNLTLITGDSLTSSNDDEDPKSHRDLSNRHSYPQQAPYWT HPQRMEKKLHAVPAGNTVKFRCPAAGNPTPTIRWLKDGQAFHGENRIGGIRLRHQHWSLVMESVVPSDRGTYTCL VENAVGSIRYNYLLDVLERSPHRPILQAGLPANTTAVVGSDVELLCKVYSDAQPHIQWLKHIVINGSSFGADGFP YVQVLKTADINSSEVEVLYLRNVSAEDAGEYTCLAGNSIGLSYQSAWLTVLPGTGRIPHLTCDSLTPAGRTKSPT LQFSLESGSSGKSSSSLVRGVRLSSSGPALLAGLVSLDLPLDPLWEFPRDRLVLGKPLGEGCFGQVVRAEAFGMD PARPDQASTVAVKMLKDNASDKDLADLVSEMEVMKLIGRHKNIINLLGVCTQEGPLYVIVECAAKGNLREFLRAR RPPGPDLSPDGPRSSEGPLSFPVLVSCAYQVARGMQYLESRKCIHRDLAARNVLVTEDNVMKIADFGLARGVHHI DYYKKTSNGRLPVKWMAPEALFDRVYTHQSDVWSFGILLWEIFTLGGSPYPGIPVEELFSLLREGHRMDRPPHCP PELYGLMRECWHAAPSQRPTFKQLVEALDKVLLAVSEEYLDLRLTFGPYSPSGGDASSTCSSSDSVFSHDPLPLG SSSFPFGSGVQT

WO 2004/030615 PCT/US2003/028547

FIGURE 1840

GTTGGAGCAGCTCCGIGGGCTGACTGGGGCGAGGCCTCAGCAGCGCGAGCTTGAGTGCGGCCGAGCCTGCGGCGC CTTCCCCTGCGGGTGGGGACGAGCGGGCCCCGCGGCGTCATCGGCGGGGAGGAGCCGCCGCGCCTCGGCCTAGCA TGTCGGAAGCGGCGAGGAGCAGCCCATGGAGACGACGGCGCCCACCGAGAACGGACATGAGGCCGTCCCCGAAG GCGAGTCGCCGGCGGGGCTGGCACGGGCGCGCGGGGGGGCTGGAGGCGCGACCGCGGCGCCCCCGAGCGGGA ATCAGAACGGCGCCGAGGGCGACCAGATCAACGCCAGCAAGAACGAGGAGGACGCGGGAAAAAATGTTCGTTGGTG GCCTGAGCTGGGATACTAGCAAAAAGATTTAAAAGACTATTTTACTAAATTTGGAGAGGTCGTTGACTGTACAA TAAAAATGGATCCCAACACTGGACGGTCAAGAGGGTTTGGGTTTATCCTGTTCAAAGATGCAGCCAGTGTGGAGA AGGTCCTAGACCAGAAGGAGCACAGGCTGGATGGCCGTGTCATTGACCCTAAAAAAGGCCATGGCTATGAAGAAGG ACCCGGTGAAGAAATCTTCGTTGGGGGTCTGAATCCTGAAGCCACTGAGGAAAAGATCAGGGAGTACTTTGGCG AGTTTGGGGAGATTGAGGCCATTGAATTGCCAATGGATCCAAAGTTGAACAAAAGACGAGGTTTTGTGTTTATCA CCTTTAAAGAAGAACCCGTGAAGAAGGTTCTGGAGAAAAAGTTCCATACTGTCAGTGGAAGCAAGTGTGAGA TCAAGGTGGCCCAGCCCAAAGAAGTCTATCAGCAGCAGCAGTATGGCTCTGGGGGCCGTGGAAACCGCAACCGAG GGAACCGAGGCAGCGGAGGTGGTGGAGGTGGAGGTCAGGGTAGTACAAACTACGGCAAGAGCCAGCGACGTG GTGGCCATCAGAATAACTACAAGCCATACTGAGGCGGCAGCAGGAGCGACCAACTGATCGCACACATGCTTTGTT TGGATATGGAGTGAACACAATTATGTACCAAATTTAACTTGGCAAACTTTCTATTGCCTGTCCCATGTGCATCTT ATTTAAAATTTCCCCCATGGAAATCACTCTCCTGTTGACTATTTCCAGAGCTCTAGGTGTTTAGGCAGCGTGTGG TGTCTGAGAGGCCATAGCGCCATCATGGGCTGATTTTTATTACCAGGTCCCCCAGAAGCAGGTGGGAGGCTCTGC TTCCTGCTGCCGCTCTGCAGCCTGGACCTGTGGACCCTGGTTGTAAAGAGTAAATTGTATCTTAGGAAACCAGTG TCACCTTTTTTCACCTTTTAATTTTATATTTTGCGTCATACATTTCCTGTAACGGAAGTGTTAATTTTACTG TACTITTTGGTACCTTTTGGGAATCTAATGTATTGTAAGGTATTTTACACGTGTCCTGATTTTGCCACAACCTGG ATATTGAAGCTATCCAAGCTTTTGAAATAAAATTTAAAAACCCCCAAGCCTGGGTGAGTGTGGG

PCT/US2003/028547

2002/6881 FIGURE 1841

GGCACCGCGCGGGACGGAGCTTGGCTGTTGGTCGGTGGGTTCCCGTGCGGCGGCGGCCAAGGAGGAGGAGACACA GTTGGAGCAGCTCCGTGGGCTGACTGGGGCGAGGCCTCAGCAGCGCGAGCTTGAGTGCGGCCGAGCCTGCGGCGC CTTCCCCTGCGGGTGGGGACGAGCGGGCCCCGCGGCGTCATCGGCGAGGAGCCGCCGCGCCCTCGGCCTAGCA TGTCGGAAGCGGGCGAGGAGCAGCCCATGGAGACGACGGCGCCACCGAGAACGGACATGAGGCCGTCCCCGAAG ATCAGAACGGCGCCGAGGGCGACCAGATCAACGCCAGCAAGAACGAGGAGGACGCGGGAAAAATGTTCGTTGGTG GCCTGAGCTGGGATACTAGCAAAAAGATTTAAAAGACTATTTTACTAAATTTGGAGAGGTCGTTGACTGTACAA TAAAAATGGATCCCAACACTGGACGGTCAAGAGGGTTTGGGTTTATCCTGTTCAAAGATGCAGCCAGTGTGGAGA AGGTCCTAGACCAGAAGGAGCACAGGCTGGATGGCCGTGTCATTGACCCTAAAAAAGGCCATGGCTATGAAGAAGG ACCCGGTGAAGAAAATCTTCGTTGGGGGTCTGAATCCTGAAGCCACTGAGGAAAAGATCAGGGAGTACTTTGGCG AGTTTGGGGAGATTGAGGCCATTGAATTGCCAATGGATCCAAAGTTGAACAAAAGACGAGGTTTTGTGTTTATCA CCTTTAAAGAAGAAGCCCGTGAAGAAGGTTCTGGAGAAAAAGTTCCATACTGTCAGTGGAAGCCAGTGTGAGA TCAAGGTGGCCCAGCCCAAAGAAGTCTATCAGCAGCAGCAGTATGGCTCTGGGGGGCCGTGGAAACCGCAACCGAG GGAACCGAGGCAGCGGAGGTGGTGGAGGTGGAGGTCAGGGTAGTACAAACTACGGCAAGAGCCAGCGACGTG GTGGCCATCAGAATAACTACAAGCCATACTGAGGCGGCAGCAGCAGCGACCAACTGATCGCACATGCTTTGTT TGGATATGGAGTGAACACAATTATGTACCAAATTTAACTTGGCAAACTTTCTATTGCCTGTCCCATGTGCATCTT ATTTAAAATTTCCCCCATGGAAATCACTCTCCTGTTGACTATTTCCAGAGCTCTAGGTGTTTAGGCAGCGTGTGG TGTCTGAGAGGCCATAGCGCCATCATGGGCTGATTTTTATTACCAGGTCCCCCAGAAGCAGGTGGGAGGCTCTGC TTCCTGCTGCCGCTCTGCAGCCTGGACCTGTGGACCCTGGTTGTAAAGAGTAAATTGTATCTTAGGAAACCAGTG TCACCTTTTTTCACCTTTTAATTTTATATTATTTGCGTCATACATTTCCTGTAACGGAAGTGTTAATTTTACTG TACTTTTTGGTACCTTTTGGGAATCTAATGTATTGTAAGGTATTTTACACGTGTCCTGATTTTGCCACAACCTGG ATATTGAAGCTATCCAAGCTTTTGAAATAAAATTTAAAAACCCCCAAGCCTGGGTGAGTGTGGG

PCT/US2003/028547

FIGURE 1842

GAAATGTCTTACGATGATCATTTAGAGGTTTATTTTGAACAACTGGCAATTCCACGAATGATGGAATAAAACATA TGAAGTAGAAGGACTGGAACCTCCAGAAAAAGTACTTTAAGTTACCTACAGGTGATCCTAGTCAGGTATGAATTG ATAAGAAATGCCTGCACCTTCCCTCCTTCCTATCTTTCCCTTGCCTACAGAAAATTAAAAGGCAAAACAATGGAC ATCTACATATTCTTCATTCAGATCAACCAGTGGCTAGCATTTGCCACCTTTTGCAGTTTCTTTTCTCTTTCCATAA GTACTTTCTCTGTATCATTTGAAAGCAAATGAAAACAGTAGCCTAAAGTGTCAGTTTCAACCAGAAAATAAC ACCTGGGACTAGTGGGATGAGAGACTGAGAAAAGAAATAAGACACGGAGACAAAGTACAGAGAAAAGAACAGCGGG CCCAGGAGACCGGCACTCAGCATACGGAGGACCAGCACTGGCACCGGCCTCTGAGTTCCCTCAGTTTATTGATTA CCATTTCAGTGTCTCAGCAAGAGGAATGCGGTAGGAGAGCAGGGTGTCAGCAAGAAAACCTGTGAGCCTTTCCT TTCGCTGCTGCGGCCGCAGCCATGAGCATGCTCGGGCCTCAGAAGAGGGCTCGCCTCTAGTGTCCTCCGCTGTGGC AAGAAGAAGGTCTGGTTAGACCCCAGTGAGACCAATGAAATCGCCAATGCCAACTCCCGTCAGCAGATCCGGAAG CTCATCAAAGACGGGCTGATCATCCGCAAGCCTGTGACGGTCCATTCCCGGGCTCGATGCCGGAAAAACACCTTG GCCCGCCGGAAGGCACGTGGCCATAGGTGAGCAGAAGGGTACAGCCAATGCCCGAATGCCAGAGAAGGTC ACGTATCACAGCCTGTACCTGAAGGTGAAGGGGAATGTGTTCAAAGACAAGCGGATTCTCATGGAACACATCCAC AAGCTGAAGGCAGACAAGGCCCGCAAGAAGCTCCTGGCTGACCAGGCTGAGGCCCGCAGGTCTAAGACCAAGGAA GCAGGCAAGTGCCCTGAAGAGCGCCTCCAGGCCAAGAAGGAGGAGTTCATCAAGACTTTATCCAAGGAGGAAGAG ACCAAGAAATAAAAGCTCCCCCTTTGTCTGTACATACTGGCCTCTGTGATTACATAGATCAGCCATGAAAATAAA ACAAGCCTTAA

PCT/US2003/028547

2004/6881 FIGURE 1843

CCCGGAGTGTGAGCTGAGTGGTCCGAGCTATACCTGTGGACATTGGTTTCTCCATTGAAGAGCTGGAGGACCTTT ACATGGTGTTTAAGGCCAAGCACCTGGCTAGCCAGTACTGGGGGTGCAGCCGCACA<u>ATG</u>GCCGGCCGTCGGGACC GGGCCTGTGGCTCCCACACCCTCTGCTGGCAGGCCGCATGTTCAGGCTCCTGGACGAAAACAAGGACTCGCTGA TCAACTTCAAGGAGTTCGTGACAGGGATGAGCGGGATGTACCACGGGTACCTGACAGAGAAGCTCAAGGTGCTCT ACAAGCTACACCTTCCCCCAGCTCTGAGCCCAGAGGAAGCCGAGTCAGCCCTGGAGGCGGCCCATTATTTCACAG AGGGGACCAGCTCTCCGGACTATCGGCACTACCTTCGAATGTGGGCCAAGGAGAAAGAGGCTCAGAAGGAGACGA TTAAGGATCTTCCCAAGATGAACCAGGAGCAGTTCATTGAGCTGTGCAAGACGCTTTACAACATGTTCAGTGAAG ACCCCATGGAGCAGGACCTGTACCACGCCATCGCCACCGTGGCCAGCCTCCTGCTCCGCATCGGAGAGGTGGGGA AGAAGTTCTCAGCCCGCACAGGCAGGAAGCCCAGGGACTGTGCCACTGAGGAGGACGAGCCACCAGCACCCGAAC TGCATCAGGACGCAGCCAGGGAGCTTCAGCCCCCAGCTGCAGGAGACCCCCAAGCCAAAGCAGGCGGAGACACAC ACCTCGGAACAGCCCCACAGGAGAGCCAGGTGGTGGTGGTGGAGGGGCAGCGGCGAGGGACAGGGCTCACCCTCCC AGCTGCTGTCTGACGATGAAACCAAAGACGACATGTCCATGTCCTACTCGGTGGTCAGCACGGGCTCCCTGC AATGTGAAGACCTTGCAGACGACACGGTGCTGGTGGGCGGGGAGGCCTGCAGCCCCACAGCGCGCATCGGCGGCA CCGTCGACACCGACTGGTGCATCTCCTTTGAGCAGATCCTGGCCTCCATCCTGACGGAGTCCGTGCTGGTGAACT CTGGCCTCATCTCCTCCTTCCTCCCTTATCAGTTTCTCTTTAAAGGTGTGCCCCTCCTGCTCTCCCAGGA GCAGTGAGTTGTGAGTGGAAAGAAGGCTGGTGCAGACCCAGCTGCCTTAGACAGATTCCCTGGGCCTGCATCTCC GCGGCCAGGCCAGCTGAGTCCCTCCATCCGTGGATGCTTTCCTGCAGCTATGTGGTATGGGGGTCATTCCTGCCT CTTGGCACCAGGTTGGGGGGCATGTGCTTGTTGGGCACCAAAGTGATGGAACCCTCAGGTGCTCTCCGGGAGCCT GAACCTCCTGACTGAGGAACATGGGCAGAACATGTTTATTGCACAGAGTGGGCGCTGCGCACAGGCGTGGCTGTA CACGTGCTCTCAGCTCATCCTTTCCAGTAACTTTAAAAAAACATCCCTCAGGTCCTGATATATTTCCTTGGA TGCAATGCCTTGCTGTGGCCCCCAACCACTGCTTAGGCCTCCCAACTTCTCCCCAGGCCAAGTATGGGGCCCTGG GACGCAGAACCTGCTGGTGCAAGCTGGGCAGGTCCTGACCAACCTGCATCAGGGGATGCCCTGAGCTCCACAGGT CTTCATGGGCAGGGGTTGTGGGTCCTGGTGAAGGAAGTGCATCCTCAGGCCTGGGCTGTAGCAAGCTGTCTGCCC TTGGGTTCAAGAACCAGACTGTGGAGCCAAAGGTGACCGCAGGGGCCCCAGGGCTGGAGCCACAAGGATACCCT CACTTIGCATGAGGAGCTGAAACTGACCAGTGTCCAGTGTTAGCCCCCACATGGGGCTGCTCTTGCTTCTACTAA AAGATACAGCAGTTACCCCCTTATCCACAGGGGATACAGTGGATATCTAAAACCAGACCCCCAGTGGATGTCTAA AACCACAGATAATAACAAACCTTATACATACTGTTTTTTCCTATGCATACCTGTGATTAAGTTTATGAATT AAAAAAAAAAAAAAAAA

PCT/US2003/028547

2005/6881 FIGURE 1844

MAGRRDPSLPYLEQYRIDASQFRELFASLTPWACGSHTPLLAGRMFRLLDENKDSLINFKEFVTGMSGMYHGYLT EKLKVLYKLHLPPALSPEEAESALEAAHYFTEDSSSEEALPQEEQEGSGSEERGEEKGTSSPDYRHYLRMWAKEK EAQKETIKDLPKMNQEQFIELCKTLYNMFSEDPMEQDLYHAIATVASLLLRIGEVGKKFSARTGRKPRDCATEED EPPAPELHQDAARELQPPAAGDPQAKAGGDTHLGTAPQESQVVVEGGSGEGQGSPSQLLSDDETKDDMSMSSYSV VSTGSLQCEDLADDTVLVGGEACSPTARIGGTVDTDWCISFEQILASILTESVLVNFFEKRVDIGLKIKDQKKVE RQFSTASDHEQPGVSG

WO 2004/030615 PCT/US2003/028547

2006/6881 FIGURE 1845

CTACCTTCTGGGCAAGGAGGACGCGCGCGCGAGATTCGCCGCTTCAGCTTCTGCTGCAGCCCCGAGCCTGAGGC GGAAGCCGAGGCTGCGGGGTCCGGGACCCTGCGAGCGGCTGCTGAGCCGGGTGGCCGCCCTGTTCCCCGCGCT GCGGCCTGGCGGCTTCCAGGCGCACTACCGCGATGAGGACGGGGACTTGGTTGCCTTTTCCAGTGACGAGGAATT GACAATGGCCATGTCCTACGTGAAGGATGACATCTTCCGAATCTACATTAAAGAGAAAAAAGAGTGCCGGCGGGA CCACCGCCCACCGTGTGCTCAGGAGGCGCCCCGCAACATGGTGCACCCCAATGTGATCTGCGATGGCTGCAATGG GCCTGTGGTAGGAACCCGCTACAAGTGCAGCGTCTGCCCAGACTACGACTTGTGTAGCGTCTGCGAGGGAAAGGG CTTGCACCGGGGCACACCAAGCTCGCATTCCCCAGCCCCTTCGGGCACCTGTCTGAGGGCTTCTCGCACAGCCG CTGGCTCCGGAAGGTGAAACACGGACACTTCGGGTGGCCAGGATGGGAAATGGGTCCACCAGGAAACTGGAGCCC ACGTCCTCCTCGTGCAGGGGGGGCCCCCCCGGCCCACGGCAGAATCAGCTTCTGGTCCATCGGAGGATCCGAG TGTGAATTTCCTGAAGAACGTTGGGGAGAGTGTGGCAGCTGCCCTTAGCCCTCTGGGCATTGAAGTTGATATCGA TGTGGAGCACGGAGGAAAAGAAGCCGCCTGACCCCCGTCTCTCCAGAGAGTTCCAGCACAGAGAGAAGAGCAG CTCACAGCCAAGCAGCTGCTGCTCTGACCCCAGCAAGCCGGGTGGGAATGTTGAGGGCGCCACGCAGTCTCTGGC GGAGCAGATGAGGAAGATCGCCTTGGAGTCCGAGGGGGCGCCCTGAGGAACAGATGGAGTCGGATAACTGTTCAGG AGGAGATGATGACTGGACCCATCTGTCTTCAAAAGAAGTGGACCCGTCTACAGGTGAACTCCAGTCCCTACAGAT CCCACATCTCCCGCCAGAGGCTGACCCGCGGCTGATTGAGTCCCTCTCCCAGATGCTGTCCATGGGCTTCTCTGA TGAAGGCGGCTGGCTCACCAGGCTCCTGCAGACCAAGAACTATGACATCGGAGCGGCTCTGGACACCATCCAGTA TTCAAAGCATCCCCCGCCGTTGTGACCACTTTTGCCCACCTCTTCTGCGTGCCCCTCTTCTGTCTCATAGTTGTG TTAAGCTTGCGTAGAATTGCAGGTCTCTGTACGGGCCAGTTTCTCTGCCTTCTTCCAGGATCAGGGGTTAGGGTG GGGTGCCCTGGCTCCTTGCAGCAGGGCTGGGGCCTGCGAGACCCAAGGCTCACTGCAGCGCGCTCCTGACCCCTCC CTGCAGGGGCTACGTTAGCAGCCCAGCACATAGCTTGCCTAATGGCTTTCACTTTCTCTTTTTTTAAATGACT CATAGGTCCCTGACATTTAGTTGATTATTTTCTGCTACAGACCTGGTACACTCTGATTTTAGATAAAGTAAGCCT AGGTGTTGTCAGCAGGCAGGCTGGGGAGGCCAGTGTTGTGGGCTTCCTGCTGGGACTGAGAAGGCTCACGAAGGG CATCCGCAATGTTGGTTTCACTGAGAGCTGCCTCCTGGTCTCTTCACCACTGTAGTTCTCTCATTTCCAAACCAT CAGCTGCTTTTAAAATAAGATCTCTTTGTAGCCATCCTGTTAAATTTGTAAACAATCTAATTAAATGGCATCAGC ACTTTAACCAAT

PCT/US2003/028547

2007/6881 FIGURE 1846

 ${\tt TGCAGCCTCGGCCCGCGGGCGCCCCGCGCGCACCCGAGGAG} \underline{{\tt ATG}} {\tt AGGCTCCGCAATGGCACCTTCCTGACGCTG}$ CTGCTCTTCTGCCTGTGCGCCTTCCTCTCGCTGTCCTGGTACGCGGCACTCAGCGGCCAGAAAGGCGACGTTGTG GACGTTTACCAGCGGGAGTTCCTGGCGCTGCGCGATCGGTTGCACGCAGCTGAGCAGGAGAGCCTCAAGCGCTCC AATCGCACCTGGGGCCGCCTAACAGAGGACCCCCGATTGAAGCCGTGGAACGGCTCACACCGGCACGTGCTGCAC CTGCCCACCGTCTTCCATCACCTGCCACACCTGCTGGCCAAGGAGAGCAGTCTGCAGCCCGCGGTGCGCGTGGGC ACTCTGCACTCGCTCATCTCCGAGCTGAGCCCGCAGGAGAAGGAGGACTCGGTCATCGTGGTGCTGATCGCCGAG ACTGACTCACAGTACACTTCGGCAGTGACAGAGAACATCAAGGCCTTGTTCCCCACGGAGATCCATTCTGGGCTC CTGGAGGTCATCTCACCCTCCCCCACTTCTACCCTGACTTCTCCCGCCTCCGAGAGTCCTTTGGGGACCCCAAG GAGAGAGTCAGGTGGAGGACCAAACAGAACCTCGATTACTGCTTCCTCATGATGTACGCGCAGTCCAAAGGCATC TACTACGTGCAGCTGGAGGATGACATCGTGGCCAAGCCCAACTACCTGAGCACCATGAAGAACTTTGCACTGCAG CAGCCTTCAGAGGACTGGATGATCCTGGAGTTCTCCCAGCTGGGCTTCATTGGTAAGATGTTCAAGTCGCTGGAC CTGAGCCTGATTGTAGAGTTCATTCTCATGTTCTACCGGGACAAGCCCATCGACTGGCTCCTGGACCATATTCTG TGGGTGAAAGTCTGCAACCCCGAGAAGGATGCGAAGCACTGTGACCGGCAGAAAGCCAACCTGCGGATCCGCTTC TTTGGAAAGCAGGCGCTGCGGAAGGAGCATGTGAACCCGCCAGCAGAGGTGAGCACGAGCCTGAAGACATACCAG CACTTCACCCTGGAGAAAGCCTACCTGCGCGAGGACTTCTTCTGGGCCTTCACCCCTGCCGCGGGGGACTTCATC CGCTTCCGCTTCTTCCAACCTCTAAGACTGGAGCGGTTCTTCTTCCGCAGTGGGAACATCGAGCACCCGGAGGAC CGCACCGCCACCCTCCGGTACCCTCGGAGCCCCGACGGCTACCTCCAGATCGGCTCCTTCTACAAGGGAGTGGCA GAGGGAGAGGTGGACCCAGCCTTCGGCCCTCTGGAAGCACTGCGCCTCTCGATCCAGACGGACTCCCCTGTGTGG GTGATTCTGAGCGAGATCTTCCTGAAAAAGGCCGAC<u>TAA</u>GCTGCGGGCTTCTGAGGGTACCCTGTGGCCAGCCCT GAAGCCCACATTTCTGGGGGTGTCGTCACTGCCGTCCCCGGAGGGCCAGATACGGCCCCGCCCAAAGGGTTCTGC CCGGGCCGCGGAGGAGGCAGGCCGCCCACACTGTGCCTGAGGCCCGGAACCGTTCGCACCCGGCCTGCCCCAG TCAGGCCGTTTTAGAAGAGCTTTTACTTGGGCGCCCGCCGTCTCTGGCGCGAACACTGGAATGCATATACTACTT TATGTGCTGTGTTTTTTTTTTTGGATACATTTGATTTTTTCACGTAAGTCCACATATACTTCTATAAGAGCGTG ACTTGTAATAAAGGGTTAATGAAG

PCT/US2003/028547

2008/6881 FIGURE 1847

MRLRNGTFLTLLLFCLCAFLSLSWYAALSGQKGDVVDVYQREFLALRDRLHAAEQESLKRSKELNLVLDEIKRAV SERQALRDGDGNRTWGRLTEDPRLKPWNGSHRHVLHLPTVFHHLPHLLAKESSLQPAVRVGQGRTGVSVVMGIPS VRREVHSYLTDTLHSLISELSPQEKEDSVIVVLIAETDSQYTSAVTENIKALFPTEIHSGLLEVISPSPHFYPDF SRLRESFGDPKERVRWRTKQNLDYCFLMMYAQSKGIYYVQLEDDIVAKPNYLSTMKNFALQQPSEDWMILEFSQL GFIGKMFKSLDLSLIVEFILMFYRDKPIDWLLDHILWVKVCNPEKDAKHCDRQKANLRIRFKPSLFQHVGTHSSL AGKIQKLKDKDFGKQALRKEHVNPPAEVSTSLKTYQHFTLEKAYLREDFFWAFTPAAGDFIRFRFFQPLRLERFF FRSGNIEHPEDKLFNTSVEVLPFDNPQSDKEALQEGRTATLRYPRSPDGYLQIGSFYKGVAEGEVDPAFGPLEAL RLSIQTDSPVWVILSEIFLKKAD

PCT/US2003/028547

2009/6881 FIGURE 1848

TTTTCAGAGACTCGCCTGGCAGAGGCCTGGAGCGTCCTGCTGCGTGGACTGTGGGCCACCGAGCCACCAGGAGGTT GTTGATCTCATTCTTGCTCACTGGTCCCTGCCAGACTGGTGGTGCCTCTCTACTGTCGGGCAGCCCCACCTCTGT GCTGCCCCATCCACCTACAGCCCTCATGCCTGGGCCCAGCTGGAGGTTCTGACAGGGGCCCCCTGGGGTGGCATG CGGACCCTTCAGGGTGCCCCAGGCGCACACGGTCTCCAGAGACACAGGCACCAGGGCGTTCAGAGCTAGTCCC CTCGCTGCTGTTGACTGTCCTTGAGCAGCCCCAGGGCCGGTTTCTCAACCTCATTTGCTCACCTGAGCAATGAAG TGAGGTGGGCTCCTGGAACTGCAGCAGCCACCCCCGGGGCCATCGTGAGGCTAAGAATCCAGTGCAGGGTGAGC TGCTGCAAAAAGCAAGAGTGGGCTTTGGAGGCCAACGGATGGAGCGGATTCAGTCTGAGGCTGTTCCAGCCCTTG CTTAGGATCCACCTACCTAGGTCTGGAAATCGTATTTCCACTTCAGATGCCTTCTCAGAGGATAAAATAACCCCC GGTGGGGGAGAGTACTGGAAGAGGGCTAATTCCCCTGGTTTTCTCCCCATGAGCATTAGTGTCAGTGTAATTTTA GAGTGACCCCAGCTATCTCACGTGTGGCAGGCACAAGAACAGATGTCAATGAGCTATTGCAGAGGTGGACACCCA GATGTGTGCGCTGGCACACTGGAGGGGCCCGTAGGGTGGCTCTAGACCGCCCCCTCGTGACGGCTTGCCTACCAC CTGCAGGCGACGTTGTGGACGTTTACCAGCGGGAGTTCCTGGCGCTGCGCGATCGGTTGCACGCAGCTGAGCAGG TGCGAGACGGAGACGGCAATCGCACCTGGGGCCGCCTAACAGAGGACCCCCGATTGAAGCCGTGGAACGGCTCAC ACCGGCACGTGCTGCCCCCCCCCCCTCTTCCATCACCTGCCACCCTGCTGGCCAAGGAGAGCAGTCTGCAGC CCGCGGTGCGCGTGGGCCAGGGCCGCACCGGAGTGTCGGTGATGGGCATCCCGAGCGTGCGCGCGAGGTGC ACTCGTACCTGACTGACACTCTGCACTCGCTCATCTCCGAGCTGAGCCCGCAGGAGAAGGAGGACTCGGTCATCG TGGTGCTGATCGCCGAGACTGACTCACAGTACACTTCGGCAGTGACAGAGAACATCAAGGCCTTGTTCCCCACGG AGATCCATTCTGGGCTCCTGGAGGTCATCTCACCCTCCCCCACTTCTACCCTGACTTCTCCCCGCCTCCGAGAGT CCTTTGGGGACCCCAAGGAGAGTCAGGTGGAGGACCAAACAGAACCTCGATTACTGCTTCCTCATGATGTACG CGCAGTCCAAAGGCATCTACTACGTGCAGCTGGAGGATGACATCGTGGCCCAAGCCCAACTACCTGAGCACCATGA AGAACTTTGCACTGCAGCAGCCTTCAGAGGACTGGATGATCCTGGAGTTCTCCCAGCTGGGCTTCATTGGTAAGA TGTTCAAGTCGCTGGACCTGAGCCTGATTGTAGAGTTCATTCTCATGTTCTACCGGGACAAGCCCATCGACTGGC TCCTGGACCATATTCTGTGGGTGAAAGTCTGCAACCCCGAGAAGGATGCGAAGCACTGTGACCGGCAGAAAGCCA AACTGAAGGACAAAGACTTTGGAAAGCAGGCGCTGCGGAAGGAGCATGTGAACCCGCCAGCAGAGGTGAGCACGA GCCTGAAGACATACCAGCACTTCACCCTGGAGAAAGCCTACCTGCGCGAGGACTTCTTCTGGGCCTTCACCCCTG CCGCGGGGGACTTCATCCGCTTCCTCCAACCTCTAAGACTGGAGCGGTTCTTCTTCCGCAGTGGGAACA AGGCCCTGCAGGAGGGCCGCACCGCCACCCTCCGGTACCCTCGGAGCCCCGACGGCTACCTCCAGATCGGCTCCT TCTACAAGGGAGTGGCAGAGGGAGGGGACCCAGCCTTCGGCCCTCTGGAAGCACTGCGCCTCTCGATCCAGA ${\sf CGGACTCCCTGTGTGGGTGATTCTGAGCGAGATCTTCCTGAAAAAGGCCGAC}$ ACCCTGTGGCCAGCCCTGAAGCCCACATTTCTGGGGGTGTCGTCACTGCCGTCCCCGGAGGGCCAGATACGGCCC GGTGCTGCCCCCCCCCCGGGCCGGAGGAGGCAGGCGGCCCCCACACTGTGCCTGAGGCCCGGAACCGTTCG GAATGCATATACTACTTTATGTGCTGTTTTTTTATTCTTGGATACATTTGATTTTTTCACGTAAGTCCACATAT ACTTCTATAAGAGCGTGACTTGTAATAAAGGGTTAATGAAG

PCT/US2003/028547

FIGURE 1849

MSRVAGTRTDVNELLQRWTPRCVRWHTGGARRVALDRPLVTACLPPAGDVVDVYQREFLALRDRLHAAEQESLKR SKELNLVLDEIKRAVSERQALRDGDGNRTWGRLTEDPRLKPWNGSHRHVLHLPTVFHHLPHLLAKESSLQPAVRV GQGRTGVSVVMGIPSVRREVHSYLTDTLHSLISELSPQEKEDSVIVVLIAETDSQYTSAVTENIKALFPTEIHSG LLEVISPSPHFYPDFSRLRESFGDPKERVRWRTKQNLDYCFLMMYAQSKGIYYVQLEDDIVAKPNYLSTMKNFAL QQPSEDWMILEFSQLGFIGKMFKSLDLSLIVEFILMFYRDKPIDWLLDHILWVKVCNPEKDAKHCDRQKANLRIR FKPSLFQHVGTHSSLAGKIQKLKDKDFGKQALRKEHVNPPAEVSTSLKTYQHFTLEKAYLREDFFWAFTPAAGDFIRFRFFQPLRLERFFFRSGNIEHPEDKLFNTSVEVLPFDNPQSDKEALQEGRTATLRYPRSPDGYLQIGSFYKGV AEGEVDPAFGPLEALRLSIQTDSPVWVILSEIFLKKAD

PCT/US2003/028547

FIGURE 1850

ATGTTGGGCACGGAAGGTGGAGAGGGATTCGTGGTGAAGGTCCGGGGCTTGCCCTGGTCTTGCTCGGCCGATGAA GTGCAGAGGTTTTTTTCTGACTGCAAAATTCAAAATGGGGCTCAAGGTATTCGTTTCATCTACACCAGAGAAGGC AGACCAAGTGGCGAGGCTTTTGTTGAACTTGAATCAGAAGATGAAGTCAAATTGGCCCTGAAAAAAAGACAGAGAA CCAAATAGTCCTGACACGGCCAATGATGGCTTTGTACGGCTTAGAGGACTTCCCTTTGGATGTAGCAAGGAAGAA ATTGTTCAGTTCTTCTCAGGGTTGGAAATCGTGCCAAATGGGATAACATTGCCGGTGGACTTCCAGGGGAGGAGT ACGGGGGAGGCCTTCGTGCAGTTTGCTTCACAGGAAATAGCTGAAAAGGCTCTAAAGAAACACAAGGAAAGAATA GGGCACAGGTATATTGAAATCTTTAAGAGCAGTAGAGCTGAAGTTAGAACTCATTATGATCCACCACGAAAGCTT ATGGCCATGCAGCGGCCAGGTCCTTATGACAGACCTGGGGCTGGTAGAGGGTATAACAGCATTGGCAGAGGAGCT GGCTTTGAGAGGATGAGGCGTGGTGCTTATGGTGGAGGCTATGAGGCTATGATGATTACAATGGCTATAATGAT GGCTATGGATTTGGGTCAGATAGATTTGGAAGAGACCTCAATTACTGTTTTTCAGGAATGTCTGATCACAGATAC GGGGATGGTGGCTCTACTTTCCAGAGCACAACAGGACACTGTGTACACATGCGGGGATTACCTTACAGAGCTACT GAGAATGACATTTATAATTTTTTTCACCGCTCAACCCTGTGAGAGTACACATTGAAATTGGTCCTGATGGCAGA GTAACTGGTGAAGCAGATGTCGAGTTCGCAACTCATGAAGATGCTGTGGCAGCTATGTCAAAAGACAAAGCAAAT ATGCAACACAGATATGTAGAACTCTTCTTGAATTCTACAGCAGGAGCAAGCGGTGGTGCTTACGAACACAGATAT GTAGAACTCTTCTTGAATTCTACAGCAGGAGCAAGCGGTGGTGCTTATGGTAGCCAAATGATGGGAGGCATGGGC ACCAAGGAGCAGTGAACAGCAGCTACTACAGTAGTGGAAGCCGTGCATCTATGGGCGTGAACGGAATGGGAGGGT TTTTTTTTTTTTTTTTTTTTTAAGAAAACTTCAGTTTAACAGTTTCTGCAATACAAGCTTGTGATTTATGCTT ACTCTAAGTGGAAATCAGGATTGTTATGAAGACTTAAGGCCCAGTATTTTTGAATACAATACTCATCTAGGATGT AAGCAGTAAGCGTATTTAGGTAAAAGCAGTTGAATTATGTTAAATGTTGCCCTTTGCCACGTTAAATTGAACACT GTGAAACATTTTGGCATGTTTGTTAATTCTAGTTTCATTTAATAACCTGTAAGGCACGTAAGTTTAAGCTTTTTT TTTTTTTAAGTTAATGGGAAAAATTTGAGACGCAATACCAATACTTAGGATTTTGGTCTTGGTGTTTGTATGAAA TTCTGAGGCCTTGATTTAAATCTTTCATTGTATTGTGATTTCCTTTTAGGTATATTGCGCTAAGTGAAACTTGTC AAATAAATCCTCCTTTTAAAAACTGC

PCT/US2003/028547

2012/6881 FIGURE 1851

MMLGTEGGEGFVVKVRGLPWSCSADEVQRFFSDCKIQNGAQGIRFIYTREGRPSGEAFVELESEDEVKLALKKDR ETMGHRYVEVFKSNNVEMDWVLKHTGPNSPDTANDGFVRLRGLPFGCSKEEIVQFFSGLEIVPNGITLPVDFQGR STGEAFVQFASQEIAEKALKKHKERIGHRYIEIFKSSRAEVRTHYDPPRKLMAMQRPGPYDRPGAGRGYNSIGRG AGFERMRRGAYGGGYGGYDDYNGYNDGYGFGSDRFGRDLNYCFSGMSDHRYGDGGSTFQSTTGHCVHMRGLPYRA TENDIYNFFSPLNPVRVHIEIGPDGRVTGEADVEFATHEDAVAAMSKDKANMQHRYVELFLNSTAGASGGAYEHR YVELFLNSTAGASGGAYGSQMMGGMGLSNQSSYGGPASQQLSGGYGGGSSMSGYDQVLQENSSDFQSNIA

PCT/US2003/028547

2013/6881 FIGURE 1852

PCT/US2003/028547

2014/6881 FIGURE 1853

MTEQMTLRGTLKGHNGWVTQIATTPQFPDMILSASRDKTIIMWKLTRDETNYGIPQRALRGHSHFVSDVVISSDG QFALSGSWDGTLRLWDLTTGTTTRRFVGHTKDVLSVAFSSDNRQIVSGSRDKTIKLWNTLGVCKYTVQDESHSEW VSCVRFSPNSSNPIIVSCGWDKLVKVWNLANCKLKTNHIGHTGYLNTVTVSPDGSLCASGGKDGQAMLWDLNEGK HLYTLDGGDIINALCFSPNRYWLCAATGPSIKIWDLEGKIIVDELKQEVISTSSKAEPPQCTSLAWSADGQTLFA GYTDNLVRVWQVTIGTR

WO 2004/030615 PCT/US2003/028547

2015/6881 FIGURE 1854

GCGGAGCCCACGGAGCCCACGGAGGAGCCCACGGAGGAGCCCCAGCGTCCGAACGGGCAGACCCCCTCGAGCCGC GAAGGAGCCCGAGAAGCAGCCACGATGTGCGGAATCTTTGCCTACATGAACTACAGAGTCCCCCGGACGAGGAAG GAGATCTTCGAAACCCTCATCAAGGGCCTGCAGCGGCTGGAGTACAGAGGCTACGACTCGGCAGGTGTGGCGATC GATGGGAATAATCACGAAGTCAAAGAAAGACACATTCAGCTGGTCAAGAAAAGGGGGAAAGTCAAGGCTCTCGAT GAAGAACTTTACAAACAAGACAGCATGGACTTAAAAGTGGAGTTTGAGACACACTTCGGCATTGCCCACACGCGC TGGGCCACCCACGGGGTCCCCAGTGCTGTCAACAGCCACCCTCAGCGCTCAGACAAAGGCAACGAATTTGTTGTC ATCCACAATGGGATCATCACAAATTACAAAGATCTGAGGAAATTTCTGGAAAGCAAAGGCTACGAGTTTGAGTCA GAAACAGATACAGAGACCATCGCCAAGCTGATTAAATATGTGTTCGACAACAGAGAAACTGAGGACATTACGTTT TCAACGTTGGTCGAGAGAGTCATTCAGCAGTTGGAAGGTGCATTCGCGCTGGTTTTCAAGAGTGTCCACTACCCA GGAGAAGCCGTTGCCACACGGAGAGGCAGCCCCCTGCTCATCGGAGTCCGGAGCAAATACAAGCTCTCCACAGAA CAGATCCCTATCTTATACAGGACGTGCACTCTGGAGAATGTGAAGAATATCTGTAAGACACGGATGAAGACGCTG GACAGCTCCGCCTGCATGCTGTGGGCGACAAGGCCGTGGAATTCTTCTTTGCTTCTGATGCAAGCGCTATC ATAGAGCACCAACCGGGTCATCTTCCTGGAGGACGATGACATCGCCGCAGTGGCTGATGGGAAACTCTCCATT CACCGGGTCAAGCGCTCGGCCAGTGATGACCCATCTCGAGCCATCCAGACCTTGCAGATGGAACTGCAGCAAATC ATGAAAGGTAACTTCAGTGCGTTTATGCAGAAGGAGATCTTCGAACAGCCAGAATCAGTTTTCAATACTATGAGA GGTCGGGTGAATTTTGAAACCAACACAGTGCTCCTGGGTGGCTTGAAGGACCACTTGAAGGAGATTCGACGATGC CGACGGCTCATCGTGATTGGCTGTGGAACCAGCTACCACGCTGCCGTGGCTACGCGGCAAGTTTTGGAGGAACTG ACTGAGCTTCCTGTGATGGTTGAACTTGCTAGTGATTTTCTGGACAGGAACACCCTGTGTTCAGGGATGACGTT TGCTTTTTCATCAGCCAGTCAGGCGAGACCGCGGACACCCTCCTGGCGCTGCGCTACTGTAAGGACCGCGGCGCT CTCACCGTGGGCGTCACCAACACCGTGGGCAGCTCCATCTCTCGCGAGACCGACTGCGGCGTCCACATCAACGCA ATGTCTGAAGACCGAATTTCACTACAAAACAGGAGGCAAGAGATCATCCGTGGCTTGAGATCTTTACCTGAGCTG ATCAAGGAAGTGCTGTCTCTGGAGGAGAAGATCCACGACTTGGCCCTGGAGCTCTACACGCAGAGATCGCTGCTG GTGATGGGGCGGGCTACAACTATGCCACCTGCCTGGAAGGAGCCCTGAAAATTAAAGAGATAACCTACATGCAC TCAGAAGGCATCCTGGCTGGGGAGCTGAAGCACGGGCCCCTGGCACTGATTGACAAGCAGATGCCCGTCATCATG GTCATTATGAAGGATCCTTGCTTCGCCAAATGCCAGAACGCCCTGCAGCAAGTCACGGCCCGCCAGGGTCGCCCC ATTATACTGTGCTCCAAGGACGATACTGAAAGTTCCAAGTTTGCGTATAAGACAATTGAGCTGCCCCACACTGTG GACTGCCTCCAGGGCATCCTGAGCGTGATTCCGCTGCAGCTGCTGTCCTTCCACCTGGCTGTTCTCCGAGGATAT GACGTTGACTTCCCCAGAAATCTGGCCAAGTCTGTAACTGTGGAA<u>TGA</u>GGCTGAGACCGTGACAAGACCATCACC CTGCGTGCTCCTGTAGAGCTTGACAGCTTCCACGTGCCTTCTACCCAAGTGCTTTTGCTTACAGCAGATACTGTT TCTCTGTGTCCTGAAGTCGCCAGAGGAGAAGGGAATCATTGTTTACACATGGGGATCAGAGCAGACTTCTCCACT AGACAAGATATTTATAATGACGACTGTATAGCTTTTAAGTTATTTTTCTAGTATGTGGCTTTCTGTAGCCGTGGT AACGGCCAAACTGTTCATCCTAGCTACCCATGCTCTGTGTCCAGGCTTGCTCCTGGCAGGTGGCATTCATCTCAG TCTCTGACATCCGTGGAGCCCCTCCTGCATCCACCTATGCCTCCTATAAGTCCAGCTTGAAATCTCAGCCTCCTTC AACATTTTCTCTCGTGTGTGGCCCACATCCCTCCACTTCTCCAACTTCTGTTTAATCTGATCACGGCTCTTTTT AAGCCCTGGCAGCATTTTGGTCCCTGCTCCTTGCCCATAGTAAAACAGCTTGAAATATCCCATGCAAGAGAGTAG TTTCAAGTGGGCGACTCTGCTCTTATTTAAAAGCGTGCACAATCAAAAGTACTATGCAATTTTAGGACAATAAA GAACATACAGTTCC

PCT/US2003/028547

2016/6881 FIGURE 1855

MCGIFAYMNYRVPRTRKEIFETLIKGLQRLEYRGYDSAGVAIDGNNHEVKERHIQLVKKRGKVKALDEELYKQDS
MDLKVEFETHFGIAHTRWATHGVPSAVNSHPQRSDKGNEFVVIHNGIITNYKDLRKFLESKGYEFESETDTETIA
KLIKYVFDNRETEDITFSTLVERVIQQLEGAFALVFKSVHYPGEAVATRRGSPLLIGVRSKYKLSTEQIPILYRT
CTLENVKNICKTRMKRLDSSACLHAVGDKAVEFFFASDASAIIEHTNRVIFLEDDDIAAVADGKLSIHRVKRSAS
DDPSRAIQTLQMELQQIMKGNFSAFMQKEIFEQPESVFNTMRGRVNFETNTVLLGGLKDHLKEIRRCRRLIVIGC
GTSYHAAVATRQVLEELTELPVMVELASDFLDRNTPVFRDDVCFFISQSGETADTLLALRYCKDRGALTVGVTNT
VGSSISRETDCGVHINAGPEIGVASTKAYTSQFISLVMFGLMMSEDRISLQNRRQEIIRGLRSLPELIKEVLSLE
EKIHDLALELYTQRSLLVMGRGYNYATCLEGALKIKEITYMHSEGILAGELKHGPLALIDKQMPVIMVIMKDPCF
AKCQNALQQVTARQGRPIILCSKDDTESSKFAYKTIELPHTVDCLQGILSVIPLQLLSFHLAVLRGYDVDFPRNL
AKSVTVE

PCT/US2003/028547

FIGURE 1856

PCT/US2003/028547

FIGURE 1857

ATGGCCCCCACAGTGTGGAGAGTGGACGGACAGACAGAAGCAGTGTGTGCAGCCTTGCCTCTCATCAGAGTCACT
GGGAGCAGGATTTCCTTTGACCTCGCTGAGTACACTGCGGACGTTGACGGAGTTGGCACTCTACGACTTCTAGAT
GCAGTTAAGACTTGTGGCCTTATCAACTCTGTGAAGTTCTACCAAGCCTCAACAAGTGAACTTTATGGGAAAGTG
CAGGAAATACCCCAGAAGGAGACCACCCCTTTCTATCCCCGGTCACCCTATGGTGAGAACATGCGTGCACACCGG
AGCACATGTGTGGCGTTATCTGTGGGTGTGGGGGGGGCAGCAAAACTCTATGCCTATTGGATTGTGGTGAACTTC
CGTGAGGCGTATAATCTCTTTGCAGTGAACGGCATTCTCTTCAATCATGAGAGTCCCAGAAGAGGAGATCAGTTG
AAGATTTCCGTCTTTCGATGA

PCT/US2003/028547

2019/6881 FIGURE 1858

PCT/US2003/028547

FIGURE 1859A

CCGACCAACACCCAGCTCCGACGCAGCTCCTCTGCGCCCTTGCCGCCCTCCGAGCCACAGCTTTCCTCC CGCTCCTGCCCCGGCCCGTCGCCGTCTCCGCGCTCGCAGCGCCCTCGGGAGGGCCCAGGTAGCGAGCAGCACC TCGCGAGCCTTCCGCACTCCCGCCCGGTTCCCCGGCCGTCCGCCTATCCTTGGCCCCCTCCGCTTTCTCCGCGCC GGCCCGCCTCGCTTATGCCTCGGCGCTGAGCCGCTCTCCCGATTGCCCGCCGACATGAGCTGCAACGGAGGCTCC CACCCGCGGATCAACACTCTGGGCCGCATGATCCGCGCCGAGTCTGGCCCGGACCTGCGCTACGAGGTGACCAGC GGCGGCGGGGGCACCAGCAGGATGTACTATTCTCGGCGCGCGTGATCACCGACCAGAACTCGGACGGCTACTGT CAAACCGGCACGATGTCCAGGCACCAGAACCAGAACACCATCCAGGAGCTGCTGCAGAACTGCTCCGACTGCTTG ATGCGAGCAGAGCTCATCGTGCAGCCTGAATTGAAGTATGGAGATGGAATACAACTGACTCGGAGTCGAGAATTG GATGAGTGTTTTGCCCAGGCCAATGACCAAATGGAAATCCTCGACAGCTTGATCAGAGAGATGCGGCAGATGGGC CAGCCCTGTGATGCTTACCAGAAAAGGCTTCTTCAGCTCCAAGAGCAAATGCGAGCCCTTTATAAAGCCATCAGT TTCACCAAACATGTCACCAGTGAATGTTTGGGGTGGATGAGGCAGCAAAGGGCGGAGATGGACATGGTGGCCTGG GGTGTGGACCTGGCCTCAGTGGAGCAGCACATTAACAGCCACCGGGGCATCCACAACTCCATCGGCGACTATCGC TGGCAGCTGGACAAAATCAAAGCCGACCTGCGCGAGAAATCTGCGATCTACCAGTTGGAGGAGGAGTATGAAAAC CTGCTGAAAGCGTCCTTTGAGAGGATGGATCACCTGCGACAGCTGCAGAACATCATTCAGGCCACGTCCAGGGAG ATCATGTGGATCAATGACTGCGAGGAGGAGGAGCTGCTGCACCTGGAGCGACAAGAACACCAACATCGCTCAG AAACAGGAGGCCTTCTCCATACGCATGAGTCAACTGGAAGTTAAAGAAAAAGAGCTCAATAAGCTGAAACAAGAA AGTGACCAACTTGTCCTCAATCAGCATCCAGCTTCAGACAAAATTGAGGCCTATATGGACACTCTGCAGACGCAG TGGAGTTGGATTCTTCAGATCACCAAGTGCATTGATGTTCATCTGAAAAAAATGCTGCCTACTTTCAGTTTTTTG AAGAGGCGCAGTCTACTGAAGCATACCTGAAGGGGCTCCAGGACTCCATCAGGAAGAAGTACCCCTGCGACAAGA ACATGCCCCTGCAGCACCTGCTGGAACAGATCAAGGAGCTGGAGAAAAGAACGAGAGAAAATCCTTGAATACAAGC GTCAGGTGCAGAACTTGGTAAACAAGTCTAAGAAGATTGTACAGCTGAAGCCTCGTAACCCAGACTACAGAAGCA TCCTGAAGGACAACAACGAGCGCAGCAAGTGGTACGTGACGGGCCCGGGAGGCGTTGACATGCTTGTTCCCTCTG TGGGGCTGATCATCCCTCCGAACCCACTGGCCGTGGACCTCTCTTGCAAGATTGAGCAGTACTACGAAGCCA TCTTGGCTCTGTGGAACCAGCTCTACATCAACATGAAGAGCCTGGTGTCCTGGCACTACTGCATGATTGACATAG AGAAGATCAGGGCCATGACAATCGCCAAGCTGAAAACAATGCGGCAGGAAGATTACATGAAGACGATAGCCGACC TTGAGTTACATTACCAAGAGTTCATCAGAAATAGCCAAGGCTCAGAGATGTTTGGAGATGATGACAAGCGGAAAA TACAGTCTCAGTTCACCGATGCCCAGAAGCATTACCAGACCCTGGTCATTCAGCTCCCTGGCTATCCCCAGCACC AGACAGTGACCACAACTGAAATCACTCATCATGGAACCTGCCAAGATGTCAACCATAATAAAGTAATTGAAACCA AGGGCAGGATGACTCTCAAAAACCTCCCTCTAGCAGACCAGGGATCTTCTCACCACATCACAGTGAAAATTAACG AGCTTAAGAGTGTGCAGAATGATTCACAAGCAATTGCTGAGGTTCTCAACCAGCTTAAAGATATGCTTGCCAACT TCAGAGGTTCTGAAAAGTACTGCTATTTACAGAATGAAGTATTTGGACTATTTCAGAAACTGGAAAATATCAATG GTGTTACAGATGGCTACTTAAATAGCTTATGCACAGTAAGGGCACTGCTCCAGGCTATTCTCCAAACAGAAGACA TGTTAAAGGTTTATGAAGCCAGGCTCACTGAGGAGGAAACTGTCTGCCTGGACCTGGATAAAGTGGAAGCTTACC GCTGTGGACTGAAGAAAATAAAAAATGACTTGAACTTGAAGAAGTCGTTGTTGGCCACTATGAAGACAGAACTAC AGAAAGCCCAGCAGATCCACTCTCAGACTTCACAGCAGTATCCACTTTATGATCTGGACTTGGGCAAGTTCGGTG AACAAATCAAGCAATTGAGGAATTATCGTGATAACTATCAGGCTTTCTGCAAGTGGCTCTATGATGCTAAACGCC GCCAGGATTCCTTAGAATCCATGAAATTTGGAGATTCCAACACAGTCATGCGGTTTTTGAATGAGCAGAAGAACT TGCACAGTGAAATATCTGGCAAACGAGACAAATCAGAGGAAGTACAAAAAATTGCTGAACTTTGCGCCAATTCAA TTAAGGATTATGAGCTCCAGCTGGCCTCATACACCTCAGGACTGGAAACTCTGCTGAACATACCTATCAAGAGGA CCATGATTCAGTCCCCTTCTGGGGTGATTCTGCAAGAGGCTGCAGATGTTCATGCTCGGTACATTGAACTACTTA CAAGATCTGGAGACTATTACAGGTTCTTAAGTGAGATGCTGAAGAGTTTGGAAGATCTGAAGCTGAAAAATACCA AGATCGAAGTTTTGGAAGAGGAGCTCAGACTGGCCCGAGATGCCAACTCGGAAAACTGTAATAAGAACAAATTCC TGGATCAGAACCTGCAGAAATACCAGGCAGAGTGTTCCCAGTTCAAAGCGAAGCTTGCGAGCCTGGAGGAGCTGA AGAGACAGGCTGAGCTGGATGGGAAGTCGGCTAAGCAAAATCTAGACAAGTGCTACGGCCAAATAAAAGAACTCA

PCT/US2003/028547

FIGURE 1859B

ATGAGAAGATCACCCGACTGACTTATGAGATTGAAGATGAAAAGAGAAGAAGAAAATCTGTGGAAGACAGATTTG TAGAGTCTGAGAAAGCCATCAAGGAGAAGGAGTACGAGATTGAAAGGTTGAGGGTTCTACTGCAGGAAGAAGGCA CCCGGAAGAGAAATATGAAAATGAGCTGGCAAAGGTAAGAAACCACTATAATGAGGAGATGAGTAATTTAAGGA ACAAGTATGAAACAGAGATTAACATTACGAAGACCACCATCAAGGAGATATCCATGCAAAAAAGAGGATGATTCCA AAAATCTTAGAAACCAGCTTGATAGACTTTCAAGGGAAAATCGAGATCTGAAGGATGAAATTGTCAGGCTCAATG ACAGCATCTTGCAGGCCACTGAGCAGCGAAGGCGAGCTGAAGAAAACGCCCTTCAGCAAAAGGCCTGTGGCTCTG AGATAATGCAGAAGAAGCAGCATCTGGAGATAGAACTGAAGCAGGTCATGCAGCAGCGCTCTGAGGACAATGCCC GGCACAAGCAGTCCCTGGAGGAGGCTGCCAAGACCATTCAGGACAAAAATAAGGAGATCGAGAGACTCAAAGCTG AGTTTCAGGAGGAGGCCAAGCGCCGCTGGGAATATGAAAATGAACTGAGTAAGGTAAGAAACAATTATGATGAGG AGATCATTAGCTTAAAAAATCAGTTTGAGACCGAGATCAACATCACCAAGACCACCATCCACCAGCTCACCATGC AGAAGGAAGAGGATACCAGTGGCTACCGGGCTCAGATAGACAATCTCACCCGAGAAAACAGGAGCTTATCTGAAG AAATAAAGAGGCTGAAGAACACTCTAACCCAGACCACAGAGAATCTCAGGAGGGTGGAAGAAGACATCCAACAGC AAAAGGCCACTGGCTCTGAGGTGTCTCAGAGGAAACAGCAGCTGGAGGTTGAGCTGAGACAAGTCACTCAGATGC GAACAGAGGAGAGCGTAAGATATAAGCAATCTCTTGATGATGCTGCCAAAACCATCCAGGATAAAAACAAGGAGA TAGAAAGGTTAAAACAACTGATCGACAAAGAAACAAATGACCGGAAATGCCTGGAAGATGAAAACGCGAGATTAC AAGAACTGACACGCCTGAGGATCGACTATGAAAGGGTTTCCCAGGAGGAGGACTGTGAAGGACCAGGATATCACGC GGTTCCAGAACTCTCTGAAAGAGCTGCAGCTGCAGAAGCAGAAGGTGGAAGAGGAGCTGAATCGGCTGAAGAGGA CCGCGTCAGAAGACTCCTGCAAGAGGAAGAAGCTGGAAGAGAGCTGGAAGGCATGAGGAGGTCGCTGAAGGAGC AAGCCATCAAAATCACCAACCTGACCCAGCAGCTGGAGCAGCATCCATTGTTAAGAAGAGGAGTGAGGATGACC TCCGGCAGCAGAGGGACGTGCTGGATGGCCACCTGAGGGAAAAGCAGAGGACCCAGGAAGAGCTGAGGAGGCTCT CTTCTGAGGTCGAGGCCCTGAGGCGGCAGTTACTCCAGGAACAGGAAAGTGTCAAACAAGCTCACTTGAGGAATG AGCATTTCCAGAAGGCGATAGAAGATAAAAGCAGAAGCTTAAATGAAAGCAAAATAGAAATTGAGAGGCTGCAGT CTCTCACAGAGAACCTGACCAAGGAGCACTTGATGTTAGAAGAAGAACTGCGGAACCTGAGGCTGGAGTACGATG ACCTGAGGAGGAGGAGCGAAGCGGACAGTGATAAAAATGCAACCATCTTGGAACTAAGGAGCCAGCTGCAGA AAATTGAGAAATTCCAAAAGCAGGCTTTAGAGGCATCTAATAGGATTCAGGAATCAAAGAATCAGTGTACTCAGG TGGTACAGGAAAGAGAGAGCCTTCTGGTGAAAATCAAAGTCCTGGAGCAAGACAAGGCAAGGCTGCAGAGGCTGG AGGATGAGCTGAATCGTGCAAAATCAACTCTAGAGGCAGAAACCAGGGTGAAACAGCGCCTGGAGTGTGAGAAAC AGCAAATTCAGAATGACCTGAATCAGTGGAAGACTCAATATTCCCGCAAGGAGGAGGCTATTAGGAAGATAGAAT CGGAAAGAGAAAAGAGTGAGAGAGAAGAACAGTCTTAGGAGTGAGATCGAAAGACTCCAAGCAGAGATCAAGA GAATTGAAGAGAGGTGCAGGCGTAAGCTGGAGGATTCTACCAGGGAGACACAGTCACAGTTAGAAACAGAACGCT CCCGATATCAGAGGGAGATTGATAAACTCAGACAGCGCCCATATGGGTCCCATCGAGAGACCCAGACTGAGTGTG GTCAGCTGATCGACAAACCAACCTTGGACAAACTATTGAAGGGGAAGAAGTCAGTGGAAGAAGTTGCTTCTGAAA TCCAGCCATTCCTTCGGGGTGCAGGATCTATCGCTGGAGCATCTGCTTCTCCTAAGGAAAAATACTCTTTGGTAG AGGCCAAGAGAAAGAAATTAATCAGCCCAGAATCCACAGTCATGCTTCTGGAGGCCCAGGCAGCTACAGGTGGTA TAATTGATCCCCATCGGAATGAGAAGCTGACTGTCGACAGTGCCATAGCTCGGGACCTCATTGACTTCGATGACC GTCAGCAGATATATGCAGCAGAAAAAGCTATCACTGGTTTTGATGATCCATTTTCAGGCAAGACAGTATCTGTTT CAGAAGCCATCAAGAAAAATTTGATTGATAGAGAAACCGGAATGCGCCTGCTGGAAGCCCAGATTGCTTCAGGGG TGTATCGATCCCTGAATGATCCCCGAGATAGTCAGAAAAACTTTGTGGATCCAGTCACCAAAAAAGAAGGTCAGTT ACGTGCAGCTGAAGGAACGGTGCAGAATCGAACCACATACTGGTCTGCTTTCAGTACAGAAGAAGAAGCA TGTCCTTCCAAGGAATCAGACAACCTGTGACCGTCACTGAGCTAGTAGATTCTGGTATATTGAGACCGTCCACTG TCAATGAACTGGAATCTGGTCAGATTTCTTATGACGAGGTTGGTGAGAGAATTAAGGACTTCCTCCAGGGTTCAA GCTGCATAGCAGGCATATACAATGAGACCACAAAACAGAAGCTTGGCATTTATGAGGCCATGAAAATTGGCTTAG TCCGACCTGGTACTGCTCTGGAGTTGCTGGAAGCCCAAGCAGCTACTGGCTTTATAGTGGATCCTGTTAGCAACT

PCT/US2003/028547

2022/6881 FIGURE 1859C

TGAGGTTACCAGTGGAGGAAGCCTACAAGAGAGGTCTGGTGGGCATTGAGTTCAAAGAGAAGCTCCTGTCTGCAG AACGAGCTGTCACTGGGTATAATGATCCTGAAACAGGAAACATCATCTCTTTGTTCCAAGCCATGAATAAGGAAC TCATCGAAAAGGGCCACGGTATTCGCTTATTAGAAGCACAGATCGCAACCGGGGGGATCATTGACCCAAAGGAGA GCCATCGTTTACCAGTTGACATAGCATATAAGAGGGGCTATTTCAATGAGGAACTCAGTGAGATTCTCTCAGATC AGAATACCCTCAGGAAGCGTAGAGTGGTCATAGTTGACCCAGAAACCAATAAAGAAATGTCTGTTCAGGAGGCCT ACAAGAAGGGCCTAATTGATTATGAAACCTTCAAAGAACTGTGTGAGCAGGAATGTGAATGGGAAGAAATAACCA CTATTGACAAGGGCCTTGTTGACAGGAAGTTCTTTGATCAGTACCGATCCGGCAGCCTCAGCCTCAATTTG CTGACATGATCTCCTTGAAAAATGGTGTCGGCACCAGCAGCAGCATGGGCAGTGGTGTCAGCGATGATGTTTTTA GCAGCTCCCGACATGAATCAGTAAGTAAGATTTCCACCATATCCAGCGTCAGGAATTTAACCATAAGGAGCAGCT CTTTTTCAGACACCCTGGAAGAATCGAGCCCCATTGCAGCCATCTTTGACACAGAAAACCTGGAGAAAATCTCCA TTACAGAAGGTATAGAGCGGGCATCGTTGACAGCATCACGGGTCAGAGGCTTCTGGAGGCTCAGGCCTGCACAG GTGGCATCATCCACCCAACCACGGGCCAGAAGCTGTCACTTCAGGACGCAGTCTCCCAGGGTGTGATTGACCAAG ACATGGCCACCAGGCTGAAGCCTGCTCAGAAAGCCTTCATAGGCTTCGAGGGTGTGAAGGGAAAGAAGAAGATGT CAGCAGCAGAGGCAGTGAAAGAAAAATGGCTCCCGTATGAGGCTGGCCAGCGCTTCCTGGAGTTCCAGTACCTCA CGGGAGGTCTTGTTGACCCGGAAGTGCATGGGAGGATAAGCACCGAAGAAGCCATCCGGAAGGGGTTCATAGATG GCCGCGCCGCACAGAGGCTGCAAGACACCAGCAGCTATGCCAAAATCCTGACCTGCCCCAAAACCAAATTAAAAA TATCCTATAAGGATGCCATAAATCGCTCCATGGTAGAAGATATCACTGGGCTGCGCCTTCTGGAAGCCGCCTCCG TGTCGTCCAAGGGCTTACCCAGCCCTTACAACATGTCTTCGGCTCCGGGGTCCCGGCTCCGGCTCCGGGAT $\tt CTCGCTCCGGATCTCGCTCCGGGTCCCGCAGTGGGTCCCGGAGAGGGAAGCTTTGACGCCACAGGGAATTCTTCCT$ ${\tt ACTCTTATTCCTACTCATTTAGCAGTAGTTCTATTGGGCACTAGTAGTCAGTTGGGAGTGGTTGCTATACCTTGA}$ CTTCATTTATATGAATTTCCACTTTATTAAATAATAGAAAAGAAAATCCCGGTGCTTGCAGTAGAGTGATAGGAC ATTCTATGCTTACAGAAAATATAGCCATGATTGAAATCAAATAGTAAAGGCTGTTCTGGCTTTTTATCTTCTTAG CTCATCTTAAATAAGCAGTACACTTGGATGCAGTGCGTCTGAAGTGCTAATCAGTTGTAACAATAGCACAAATCG AACTTAGGATTTGTTTCTTCTCTGTGTTTCGATTTTTGATCAATTCTTTAATTTTGGAAGCCTATAATACAG TTTTCTATTCTTGGAGATAAAATTAAATGGATCACTGATATTTTAGTCATTCTGCTTCTCATCTAAATATTTCC ATATTCTGTATTAGGAGAAAATTACCCTCCCAGCACCAGCCCCCTCTCAAACCCCAACCCAAAACCAAGCATT TTGGAATGAGTCTCCTTTAGTTTCAGAGTGTGGATTGTATAACCCATATACTCTTCGATGTACTTGTTTGGTTTG GTATTAATTTGACTGTGCATGACAGCGGCAATCTTTTCTTTGGTCAAAGTTTTCTGTTTATTTTTGCTTGATAT TCGATGTACTTTAAGGTGTCTTTATGAAGTTTGCTATTCTGGCAATAAACTTTTAGACTTTT

PCT/US2003/028547

2023/6881 FIGURE 1860

GTCATGTTCTTCGCGCCCTGGTGTGGACACTGCCAGCGGCTGCAGCCGACTTGGAATGACCTGGGAGACAAATAC AACAGCATGGAAGATGCCAAAGTCTATGTGGCTAAAGTGGACTGCACGGCCCACTCCGACGTGTGCTCCGCCCAG GGGGTGCGAGGATACCCCACCTTAAAGCTTTTCAAGCCAGGCCAAGAAGCTGTGAAGTACCAGGGTCCTCGGGAC TTCCAGACACTGGAAACTGGATGCTGCAGACACTGAACGAGGCCAGTGACACCAGAGCCGGAAGTGGAACCG GACCACTTTATCAAGTTCTTCGCTCCGTGGTGTGGTCACTGCAAAGCCCTGGCTCCAACCTGGGAGCAGCTGGCT CTGGGCCTTGAACATTCCGAAACTGTCAAGATTGGCAAGGTTGATTGTACACAGCACTATGAACTCTGCTCCGGA AACCAGGTTCGTGGCTATCCCACTCTTCTCTGGTTCCGAGATGGGAAAAAGGTGGATCAGTACAAGGGAAAAGCGG GATTTGGAGTCACTGAGGGAGTACGTGGAGTCGCAGCTGCAGCGCACAGAGACTGGAGCGACGGAGACCGTCACG TTCGATGACACCATTGCAGAAGGAATAACCTTCATCAAGTTTTATGCTCCATGGTGTGGTCATTGTAAGACTCTG GCTCCTACTTGGGAGGAACTCTCTAAAAAGGAATTCCCTGGTCTGGCGGGGGTCAAGATCGCCGAAGTAGACTGC ACTGCTGAACGGAATATCTGCAGCAAGTATTCGGTACGAGGCTACCCCACGTTATTGCTTTTCCGAGGAGGGAAG AAAGTCAGTGAGCACAGTGGAGGCAGAGACCTTGACTCGTTACACCGCTTTGTCCTGAGCCAAGCGAAAGACGAA CTTTAGGAACACAGTTGGAGGTCACCTCTCCTGCCCAGCTCCCGCACCCTGCGTTTAGGAGTTCAGTCCCACAGA TTTTCCAAGCCAACACTCTACAGATTCTTTATTAAGTTAAGTTTCTCTAAGTAAATGTGTAACTCATGGTCAC TGTGTAAACATTTTCAGTGGCGATATATCCCCTTTGACCTTCTCTTGATGAAATTTACATGGTTTCCTTTGAGAC CACATCCAAAGCATAGTTTACCTGCCCACGAGTTCTGGAAAGGTGGCCTTGTGGCAGTATTGACGTTCCTCTGAT CTTAAGGTCACAGTTGACTCAATACTGTGTTGGTCCGTAGCATGGAGCAGATTGAAATGCAAAAACCCACACCTC TGGAAGATACCTTCACGGCCGCTGCTGGAGCTTCTGTTGCTGTGAATACTTCTCTCAGTGTGAGAGGTTAGCCGT GATGAAAGCAGCGTTACTTCTGACCGTGCCTGAGTAAGAGAATGCTGATGCCATAACTTTATGTGTCGATACTTG TCAAATCAGTTACTGTTCAGGGGATCCTTCTGTTTCTCACGGGGTGAAACATGTCTTTAGTTCCTCATGTTAACA CGAAGCCCAGAGCCCACATGAACTGTTGGATGTCTTCCTTAGAAAGGGTAGGCATGGAAAATTCCACGAGGCTCA TTCTCAGTATCTCATTAACTCATTGAAAGATTCCAGTTGTATTTGTCACCTGGGGTGACAAGACCAGACAGGCTT TCCCAGGCCTGGGTATCCAGGGAGGCTCTGCAGCCCTGCTGAAGGGCCCTAACTAGAGTTCTAGAGTTTCTGATT CTGTTTCTCAGTAGTCCTTTTAGAGGCTTGCTATACTTGGTCTGCTTCAAGGAGGTCGACCTTCTAATGTATGAA GAATGGGATGCATTTGATCTCAAGACCAAAGACAGATGTCAGTGGGCTGCTCTGGCCCTGGTGTGCACGGCTGTG GCAGCTGTTGATGCCAGTGTCCTCTAACTCATGCTGTCCTTGTGATTAAACACCTCTATCTCCCTTGGGAATAAG CACATACAGGCTTAAGCTCTAAGATAGGTGTTTGTCCTTTTACCATCGAGCTACTTCCCATAATAACCACT TTGCATCCAACACTCTTCACCCACCTCCCATACGCAAGGGGATGTGGATACTTGGCCCAAAGTAACTGGTGGTAG GAATCTTAGAAACAAGACCACTTATACTGTCTGTCTGAGGCAGAAGATAACAGCAGCATCTCGACCAGCCTCTGC AGCACAACTGTCAAGAGTCTTGTACACACAACTTCAGCTTTGCATCACGAGTCTTGTATTCCAAGAAAATCAAAG

PCT/US2003/028547

2024/6881 FIGURE 1861

PCT/US2003/028547

2025/6881 FIGURE 1862

PCT/US2003/028547

2026/6881 FIGURE 1863

ACTTCTGGGGCAGCCGTGAGCAGCGGGCACACGGGCAGCCACGAAAGCAGCAGCGAGGGTGGTGCAAACACCTCA TAACTACACCGAATCCAGTAGCGCCTGGCGCCCCCGGCGCGCAAGGCCGCCTCTACTCCGCCTCATCTTTGTCCC AAGTCCTTTCACAGCCTGCCTTCCTCAAACGGCCCGATGCGCCCCGTCTTTGCCGGAGTAAGCAGACCGCCAGC CGGGAAACGCCCTCGGCGCACCCACTGGCGCGCATGCTCAGTCCGCGCGGCGGCTGCGAGTAGGAAGCTCCGC GGGCAGGGGCTCCCGCTCCAGGTTCCTTGAAGCACTTCCGACCGCGAAGCCCGGCGCGAGAAGCGAGCTAACCCA AGAGCCAACAACGAGCGCGGAGAGGGCAGCGGACTGAGCGGAGCCGGCCCAGAGCGGGCTCGGAGCCCGGGTC GTCATGTGGAGAGCATCGACAAGCGCCACTGCTCGCTGGTCTACGTCCCCGAGGAGATCTACCGCTATGCCCGGA GCCTGGAGGAGCTGCTGCTGGACGCCAACCAGCTCCGCGAGCTGCCCGAGCAATTTTTCCAGCTAGTCAAATTAC TAGATGTGTCTCGAAATGAGATTCCTGAAATTCCAGAAAGCATTTCATTCTGTAAAGCACTGCAGGTAGCTGACT TCAGCGGAAACCCACTGACTAGGTTGCCAGAAAGCTTTCCTGAATTACAGAATTTAACATGTCTTTCTGTAAATG TTCTTACATATCTTCCTGACTCTTTACCCAGCTGCGAAGACTAGAAGAACTTGATTTAGGAAACAATGAAATAT ATAATTTGAATCAATTGGAGCCCTCTTACATC<u>TAA</u>AAGATCTCTGGTTGGATGGAAATCAACTGTCAGAATTACC TCAGGAAATAGGAAATCTGAAGAACCTGCTGTTTTAGATGTCTCTGAAAACAGGTTGGAAAGACTTCCTGAAĠA AATCAGTGGCCTGACTTCATTAACGGATTTAGTCATTTCCCAGAACTTATTAGAAACGATTCCGGATGGCATTGG AAAACTAAAGAAACTGTCAATCTTGAAGGTGGATCAGAATAGACTCACACAGTTGCCTGAAGCAGTTGGGGAATG TGANAGTCTCACTGAGTTAGTTCTTACAGAAAATCAGCTCCTGACCCTGCCTAAAAGCATTGGAAAACTAAAGAA GTTGAGCAACTTGAATGCAGACAGAAATAAATTAGTGTCCTTACCAAAAGAGGTATGTGCTTTTAGAGAAATCAC ATGATAATAATTATGAAGAAATAATAATAATACATAAGGGATCAAAAATGTCAAATGCTTTGAAAAGACGCATGT GTTGTTTTTTAAAGGTGTGAACTCTAAATCTGTGAGTATAGAGCCAACTGGAGGAATTATGTCAAAGAATGATCA TCAGTAACATTAAGGAGAGTTGGAAAAGGTGAATTTATAGGATTTTAAATGGGAGAAAGAAAGAGATTGACATTT TGGGTTTGATATACAGAGAATGGTGACACCATTGGCAGAAATTGATAATTTGGGAGTTTGACAGAGGAAGTGGAT GCCTTTGGGTTTGATTTTTGAATTTAATGTGAAATTAAGCTCCATCCCATAAGCAATTGGAATTATAAAAATTGA TCTTGATGCAACCATATTTCTGGGCAGAGATTTACATTGGGCCATGCTCATGTCTTGGATGAGGTTGAACAAACT GTAGTCTAAGCACGAGAAAATGAGACATCACCATCTGTTGTGGAGAGTAGCTGTATGGACTGAGAGGCATTTAAA TTCTGGCAAGGGAGGTGGAAATGCTGACAATGAGGAGGAAGCTTATAGTGGGTCAAACAAGGAGGTGTCTAGTGT AGGCAAGAGAATTGCCTGAACCCGGGAGGCTAAGGTTGCAGTGAGCCGAGACCACGCCACTGCACTCCAGCCCGG

PCT/US2003/028547

2027/6881 FIGURE 1864

MFHCIPLWRCNRHVESIDKRHCSLVYVPEEIYRYARSLEELLLDANQLRELPEQFFQLVKLRKLGLSDNEIQRLP PEIANFMQLVELDVSRNEIPEIPESISFCKALQVADFSGNPLTRLPESFPELQNLTCLSVNDISLQSLPENIGNL YNLASLELRENLLTYLPDSLTQLRRLEELDLGNNEIYNLNQLEPSYI WO 2004/030615 PCT/US2003/028547

2028/6881 FIGURE 1865A

ATGGCTTTCCGCAGGAGGACGAAAAGTTACCCGCTCTTCAGCCAGGAGTTCGTCATCCACAACCATGCGGACATC TTACCTCAGTATAACATTAGCGTGCCTACAGCAGACAGTGAGACCGTGCACTACCACTATGGCCCTAAGGACCTG GTCACAATCTTGTTCTACATCTTCATCACCATCTTGCATGCTGTGGTTCAGGAGTACATTTTAGATAAAATC AGCAAACGGCTTCATCTCCCAAAGTCAAACACAGCAAGTTCAATGAATCTGGACAGCTGGTCGTCTTTCATTTC ACCTCGGTGATTTGGTGCTTCTACGTGGTGGTGACGGAAGGATACTTAACAAACCCAAGAAGCCTCTGGGAAGAC $\verb|CCTGAGCTATACTTCCAGAAGGTACGGAAGGAGGAAATTCCCCGCCAGCTCCAGTATATTTGCCTGTACCTGGTG|\\$ CATATAGCTGGAGCATACCTCTTAAACCTGAGCCGCCTGGGCCTGATCTTGCTGCTGCTGCAGTACTCAACTGAG TTCCTCTTCCACACGGCTAGACTCTTCTACTTTGCAGATGAAAACAACGAGAAACTGTTCAGTGCCTGGGCTGCT GTTTTTGGGGTTACCCGCCTCTTCATCCTCACCCTTGCCGTGCTGGCCATTGGCTTTGGACTGGCTCGCATGGAA AACCAGGCATTTGATCCCGAGAAAGGGAACTTCAACACTTTGTTTTGCAGGCTCTGCGTGCTGCTGGTGTGT GCCGCCCAGGCCTGGCTCATGTGGCGCTTCATCCACTCCCAGCTGCGGCACTGGCGGAATACTGGAATGAGCAG AATGGAGTGGTGAAGGCAGAGAACGGAACCTCCCCACGGACTAAGAAACTCAAGTCTCCCTAAGGCCAAAGTGCT TTGGCTTCCTCTTATTCTTCCACAAACCATTCTCAATAAAGCCAAAAATCTTTCTCTTTTCTCCCCCTCAGGCCAC TCTGTCTCTTGCCTTATGGCTGCTGCTTTTTCCTTTTTACTTCCTATTTTCACCTTATCTTGCAATTTTTCTGTCT GATTTTTACAATGGGAGGGAGCTAAGATTGCAGTCCTGTCCTTCGGTCCCCAGGGCCTGCCGGTCAGAAGCCT GGGGCTGGTAGGCCCTTGGTGGTCCTCATGTGGATGGGCAAGAAGAGAGGGGCCATCTCGGATCATAATCTCCTT GGTGCTGATTAACTGACGAGATATATGATTCCAGTTCTGCATGTACCATCTTGAGGCACAGCAGCACCACTGCTCGT TGTAAATGCCAAGGCATTTGGCTTTGGGACGTGACAACTCAATCCAGAAGGATGGTGTGAACTCGGTTGGGTCCC CTTCCCACTGCTTAGAGCGAGAGCAGAGCAAACTGCGCAGCAGGCACCTCCAGAAAGGTAATGGTGGCAGAACCC ACAGTGGAGTCGACCTAGGCCTTTCTCCAGCAGTCCCAGTCGCCATTGCTTTTTCAGCCATTCACAAGCATTCAA AGGGGCCAAACTTACTACCTTGACTTCATCTCTAGCTGCAGAAACACTAAGTCTCAAGGGCTTCAGCCCCATGCT GGTCCCTTGGTGTTCAGGGAGGGTCACTTGGACCGCTGTTCATCTGGCCGCCCTTGTTGAGTGTTCTTTGGAATT ATGATAGGCGCCTTTCTGGCCCCTTCCCTCACAGATTCTTTCCCCTCCCCTCCACCTGAAGAGAAGGCCTCCAAG TCCTTTTGGTGCCTTGTGAGGACTTTTAGAAGGGGCGTTCAGCTTTAAAAAGCCGGTCCTAATTACGGCCGGACG CAGTAGCTTACGCCTGTTATCCCAGCACTTTGGGAGGTCGAGGTGGGCAGATCACCTGAGGTTAGGAGTTCAAGA ATCCCAGCTACTCGGGAGGCTGAGGCAGGAGATCGCTTGAACCTAGAAGGCGGAGGTTGCAGTGAGCGGAGATT CGAACTCTGTTTTGAGGCAAAGGGGAGTAGTTCTTGGTAGGTGCAGGAATAGTAGTGTCATTTGGAATACTGGTC ATCTTTCTGACATCACAGTAGAAACCAAACCTTGGATTTAGATTCAAAAGGGGGGAAATGGGTCTTTTCATCAAG GCAACTCCCCTTCTCCAAGTCACTTACATCATAGATAAATTTTAGCTTCCCAGTAACTGAGGGATTTGTTTCCTA ACGCCATTGGAGGCCTTCATCCCTCTACGATAAGGTTGCAGAAATGGGAAGAGCTACCCGTGGTTGCTTTTGA TTACCCTTAGGAAGTGAGACAGTGTTTTTGAAAATATGTATTTCCCCCATTTCTCCCTCTCCTTCCCTGACACTT CTCTGGGCTGCACAGCAGAAACGTTGGTAAAAGGGCAGTTTGGTTTCAACACAGCAGACCTGATATGGGATCCCT TAGCCACTTTAGTCAAACAGCCCTGACAGAGTCTATAATTGAGTTCAGGCCCCCCACCTTGCCTAATAACTGCAA ATCGCATGTTCAGCCAGCAGCCTCCTAAGCCCACCTTCCTCCCCCATTAGAGAACACCCATCCTAGGTGCTCTCC AGGCTGTGTCATTGGCAGGGCTTCACATGCAGGAGGCCTCTCTCAGGTGAGTCCAGGTTAAACTGTTGAGTTGTG GCTTCAACAGATATGTATGGCATGCTGGGATGTGCCAGGTGCCTGCGTTGTGCCAGTTGCTGGAGAGGTAGTGTG

PCT/US2003/028547

2029/6881 FIGURE 1865B

AGCAGAGCAGCTGAAATCTTGCCATCAAGCAACCCTCATTCTCATGCCTGTAGGTTTCCATTGCTCTGTCCCAGG ACACTTGCGTGCCAGAGACGCCACAACTTCATGTCCCTGTCTCTTGCAAGCTCCCCGTGCTGCCAGTACTTCATG CCTTGGATGTGGTCCCACCAGCCCAGTGGCCGGGGTCAGCTTAGGCTCTGCTTCCCAGTGGACGGGTGTGCTAAG TGAAATAATTCCACTTCATCCTATGAGCGTGTTGGGCTAGCTTGTTCTAATTTTGGCCACTTTGGCTGTTTTCTT CAGTTTTATGCATTCTCCTGCCCCAAAGTGCCAAGCCATTTGTGAAGGCTCTGCCAGACACCTCCAAGCTTGA GAGCTCAGCACCATGCACCAAGAGCAGGAGAAAAGACGTAAACCTACCCCAGCAACTGTGGCCTCTCGACAGCCC GGATCTGTGCTACCCGCTCCCTTGGAGGTGCAGTGATGATGGGAGTTATTTTTACCATCCGGGCGCTGATA GCTGCACTATTAATAAATTGCATGTGTTCCTTTTGAAGGTAGGGGATGGTTCTGGGTGAGAGGGGAGCAGGCTGA GCCGGCGGGGGATCTGCTGTCCTCCCTTTTGAGTCAGTTCTAATCCCATGTGTGTCTGGGCCACCAGACCGAAAT GGTTGCTGAGAAACTTGTCTGTTCATGTCCCAAGGCATAACTTCCCAACATTTAAGAAACCCCAATAGACACCTC TGCCCTGGCCACGTTCACAGATCCTTCTCTTGACCGGAAACCCTGGGACCCTAAGAACCCCTGAAGCTTGGGGTG GGTGTGTGCTTCTGGGGTCTCTTTTGGGACCTCCTTTGTCAGTACCCCTTCTTTTTTCTAAGCAGCTAATAAGAG GTTGGGTGAAAGAGTGCATCTCCTCCCAGGATTCCACAACAAAATTCTTATCTTCCATGGATGCTTTAATTGGAA GTGGGTTGCCGACCCCTTGTGCCTAGAAAAGGCCTTCGCTTGGGTTTCCTTTGTATGCTTCAGCCTTCCTAGTT GGTTTTTCTAGGCCTGGTGTGAGAGGTAGGGAAGTCTGCACATAACTAATTCTTTTGCTTAAGGGCCTATGGCAC AAGTGCACAAACTTCAATTCTTGATGTTCTAAGCTCTCTCCTCTAACAGAGGGAGTGCTGAAAAGCTTTTGAGTCA AGACAATGGAGTGCTCTTCCTCCCTCACTCTGCCTTCCGAGCTTATGGTTCCTTTTCTCAGGAGAGGATTTTCAG CAGTGAGGAAGACTTTACCAACTTCTCACTCTACCCCACTACTCACATGAGTGTTAGCTCCACCTTGCAAAGGCT GAAGACCAGTTCTCCCCAGTGAAAGC'IGCCTCATTCTTTTATGGAGTTCCCTGGAGTGGCAGAGCTATAAAGACG AGCATTGGGATTTGCAGTCTCCATGTAGCCTTTCGTGCTTGGCAACCCCTGTAGACTTTTTGTCCCAAGCAGATT GCGTGCGTGCGCCTGTGTGAGAATAAGTGCCTTACTTTGCTGTGTGTTTTCAACTTGTACTCCGTGGCCAGC CCCCAGTTGCCAGGGCTCGACGGCAGCCAAGGACACCATACCTCAGTATAGTTATATAAAAAGGGACACGGATT GGTTTCTCCCTTGTGTCAGTTCTCTTCTGGCCCAGCTGGGTGGCTGTGGAAGTCTGTGAGGTGGCCCAACCACAA GCATACCTATTAAGAGAAGCCCAGAGCTTCCAGCCCCCACTTCGAAAACTCTCCTCTGGCCCCACATAGCAAACT CCTTCTCCGTTATTTTCCCCACCCCAGATTTTTTTTAAAAGGCCCACTTGCCGTAACCTCTTTTGGTCTATTTT GCTTCCCATTCAGCCCAAAGTTTATATGATAAAGGTGTTTACTTTTACTTCCCAGTCTCCAAGTGCTAACACATA AACACATACATGTCTGACTGTTGCAGAACTGTTCGAGCTCCTAATTCAGTGTTACCTTGTTTTAGTCGCAGCAAC CCTTTCCACAGCCTTTCTGTCCCTTAAAACACCTGCAACTGGGGGGAGAAATGGGACCCATGGGAGGGGGAGTCGT TTTTAGAACATGTAGCATCATCTTAGAGGTCTATTTTTAAAAAATGTGTTGAAGAGGAAAAAACCATTCTCACGA TGGGGCTTAAGTCATTGTCCAGGAATAAGATTGGCGTGGTGCCCATGACATCACCGTCACTCTGCCTAAAAGCAC TCTAGAGCTACTTGTTCACGTGGAGAGGAAGGATATTTTGCGAAGCAACAGCCGCAGGTGGAGAGCCCTGTTCAC CTGATAGGGTCTAGCTGTGACAGTAAATATAATACCGCTGTTTCCTTGGGTACAGATTTGAGTGTTCATGTGATG AGACTGTAAACCTCATTTTTCGGTTCCTCTGTTTAAAAAAACATCTGAAGGATGAACTAAGGCTGCTGGTGCCCT GAGCAACTGATAATGCAAATGTGGACAAAGTGTCTGTTTTCTACTCTAGCCTGTTCATATGGACCAAATTTCAAC AAGGAACTCAAGGAAAATTTGTACCTGCCGTATTTATGCTTTCATGTAAAAAAGGGTTGGGGGGAGGGGTGTCTT GTATGGATTTTTTAAATGTACATTTTGGAACAAATGATCAAATATTTTCTGAAATAACAATAAAAGGCAGAAAAT

PCT/US2003/028547

2030/6881 FIGURE 1866

AGCTGCGGGAGGCTCAGAGAGATTACCTGGACTTCCTGGACGACGAGGAAGACCAGGGAATTTATCAGAGCAAAG TTCGGGAGCTGATCAGTGACAACCAATACCGGCTGATTGTCAATGTGAATGACCTGCGCAGGAAAAACGAGAAGA GGGCTAACCGGCTTCTGAACAATGCCTTTGAGGAGCTGGTTGCCTTCCAGCGGGCCTTAAAGGATTTTGTGGCCT CCATTGATGCTACCTATGCCAAGCAGTATGAGGAGTTCTACGTAGGACTGGAAGGCAGCTTTGGCTCCAAGCACG TAGTTCGTCCCAAAGTCGTCCGCAGTGTCCACTACTGTCCTGCTACTAAGAAGACCATAGAGCGACGTTATTCTG ATCTCACCACCTGGTGGCCTTTCCCTCCAGCTCTGTCTATCCTACCAAGGATGAGGAGAACAATCCCCTTGAGA CAGAATATGGCCTTTCTGTCTACAAGGATCACCAGACCATCACCATCCAGGAGATGCCGGAGAAGGCCCCAGCCG GCCAGCTCCCCCGCTCTGTGGACGTCATTCTGGATGATGACTTGGTGGATAAAGCGAAGCCTGGTGACCGGGTTC AGGTGGTGGGAACCTACCGTTGCCTTCCTGGAAAGAAGGGGGGCTACACCTCTGGGACCTTCAGGACTGTCCTGA TTGCCTGTAATGTTAAGCAGATGAGCAAGGATGCTCAGCCCTCTTTCTCTGCTGAGGATATAGCCAAGATCAAGA AGTTCAGTAAAACCCGATCCAAGGATATCTTTGACCAGCTGGCCAAGTCATTGGCCCCAAGTATCCATGGGCATG ACTATGTCAAGAAAGCAATCCTCTGCTTGCTCTTGGGAGGGGTGGAACGAGACCTAGAAAATGGCAGCCACATCC GTGGGGACATCAATATTCTTCTAATAGGAGACCCATCCGTTGCCAAGTCTCAGCTTCTGCGGTATGTGCTTTGCA CTGCACCCGAGCTATCCCCACCACTGGCCGGGGCTCCTCTGGAGTGGGTCTGACGGCTGCTGTCACCACAGACC AGGAAACAGGAGAGCGCCGTCTGGAAGCAGGGGCCATGGTCCTGGCTGACCGAGGCGTGGTTTGCATTGATGAAT TTGACAAAATGTCTGACATGGATCGCACAGCCATCCATGAAGTGATGGAGCAGGGTCGAGTGACCATTGCCAAGG CTGGCATCCATGCTCGGCTGAATGCCCGCTGCAGTGTTTTGGCAGCTGCCAACCCTGTCTACGGCAGGTATGACC AGTATAAGACTCCAATGGAGAACATTGGGCTACAGGACTCACTGCTGTCACGATTTGACTTGCTCTTCATCATGC TGGATCAGATGGATCCTGAGCAGGATCGGGAGATCTCAGACCATGTCCTTCGGATGCACCGTTACAGAGCACCTG GGGAGCAGGATGGCGATGCTATGCCCTTGGGTAGTGCTGTGGATATCCTGGCCACAGATGATCCCAACTTTAGCC AGGAAGATCAGCAGGACACCCAGATTTATGAGAAGCATGACAACCTTCTACATGGGACCAAGAAGAAAAAAGGAGA AGATGGTGAGTGCAGCATTCATGAAGAAGTACATCCATGTGGCCAAAATCATCAAGCCTGTCCTGACACAGGAGT CGGCCACCTACATTGCAGAAGAGTATTCACGCCTGCGCAGCCAGGATAGCATGAGCTCAGACACCGCCAGGACAT CTCCAGTTACAGCCCGAACACTGGAAACTCTGATTCGACTGGCCACAGCCCATGCGAAGGCCCGCATGAGCAAGA CTGTGGACCTGCAGGATGCAGAGGAAGCTGTGGAGTTGGTCCAGTATGCTTACTTTAAGAAGGTTCTGGAGAAGG AGAAGAAACGTAAGAAGCGAAGTGAGGATGAATCAGAGACAGAAGATGAAGAGGAGAAAAAGCCAAGAGGACCAGG AGCAGAAGAGGAAGAAGAAGACTCGCCAGCCAGATGCCAAAGATGGGGATTCATACGACCCCTATGACTTCA GTGACACAGAGGAGGAAATGCCTCAAGTACACCTCCAAAGACGGCAGACTCACAGGAGACCAAGGAATCCCAGA ${\tt AAGTGGAGTGAATCCAGGTTGAAGGCATTCAAGGTGGCCCTCTTGGATGTTCCGGGAAGCTCATGCGC}$ AGTCAATCGGCATGAATCGCCTCACAGAATCCATCAACCGGGACAGCGAAGAGCCCTTCTCTCTAGTTGAGATCC ${\tt AGGCTGCTCTGAGCAAGATGCAGGATGACAATCAGGTCATGGTGTCTGAGGGCATCATCTTCCTCATC} {\color{red}{\bf TGA}} {\tt GGAG}$ GCCTCGTCTCTGAACTTGGGTTGTCCGAGAGAGTTTGTTCTGTGTTTCCCACCCTCTCCCTGACCCAAGTCTTT GCCTCTACTCCCTTAACAGTGTTGAATTCAACTGAAGGCGAGGAATGTTGGTGATGAAGCTGAGTTCAGGACTCG GTGGACCCTTTGGGAATGGGTCATGAAAGCTGCCATGGGGTGAGGAAAGAGGAGACAGTGGGAGAGACAATGAC TATTGCATCTTCATTGCAAAAGCACTGGCTCATCCGCCCTACTTCCCATCCCACACAAACCCAATTGTAAATAAC AGCACTTTGGTCTAGACTAGGCTTTGGGTGGTTCCAATTGGTGGAGAGAAGCTCTGAGGCACGTCATGCAGGTCA AATATCCGAGATGTTGAATAAACTTAGCCATTTCGTACAAAAAAAGGGGGGCCCGGTAAAC

PCT/US2003/028547

2031/6881 FIGURE 1867

MAGTVVLDDVELREAQRDYLDFLDDEEDQGIYQSKVRELISDNQYRLIVNVNDLRRKNEKRANRLLNNAFEELVA FQRALKDFVASIDATYAKQYEEFYVGLEGSFGSKHVSPRTLTSCFLSCVVCVEGIVTKCSLVRPKVVRSVHYCPA TKKTIERRYSDLTTLVAFPSSSVYPTKDEENNPLETEYGLSVYKDHQTITIQEMPEKAPAGQLPRSVDVILDDDL VDKAKPGDRVQVVGTYRCLPGKKGGYTSGTFRTVLIACNVKQMSKDAQPSFSAEDIAKIKKFSKTRSKDIFDQLA KSLAPSIHGHDYVKKAILCLLLGGVERDLENGSHIRGDINILLIGDPSVAKSQLLRYVLCTAPRAIPTTGRGSSG VGLTAAVTTDQETGERRLEAGAMVLADRGVVCIDEFDKMSDMDRTAIHEVMEQGRVTIAKAGIHARLNARCSVLA AANPVYGRYDQYKTPMENIGLQDSLLSRFDLLFIMLDQMDPEQDREISDHVLRMHRYRAPGEQDGDAMPLGSAVD ILATDDPNFSQEDQQDTQIYEKHDNLHGTKKKKEKMVSAAFMKKYIHVAKIIKPVLTQESATYIAEEYSRLRSQ DSMSSDTARTSPVTARTLETLIRLATAHAKARMSKTVDLQDAEEAVELVQYAYFKKVLEKEKKRKRSEDESETE DEEEKSQEDQEQKRKRRKTRQPDAKDGDSYDPYDFSDTEEEMPQVHTPKTADSQETKESQKVELSESRLKAFKVA LLDVFREAHAQSIGMNRLTESINRDSEEPFSSVEIQAALSKMQDDNQVMVSEGIIFLI

PCT/US2003/028547

FIGURE 1868

ATGACTGCATCCAACTCGCAGGTGCGCCAGAACTACCACCAGGACTCAGAGGCCGCCATCAACCGCCAGATCAAC
CTGGAGCTCTACGCCTCCTACTTTAACCTCTCCATGTCTTACTACTTTGACCGTGATGATGCGCCTTTGAAGAAC
TTTGCCAAATACTTTCTTCACCAATCTCATGAGGAGAGGGAGCATGCTGAGAAACTGATGAAACTGCAGAACCAA
CAAGAGTGTGCATTACATTTGGAAAAAAATGTGAATCAGTCACTACTGGAACTGCACAAACTGGCCACTGACAAA
AATGACCCCCATTTGTGTGACTTCATTGAGACACATTACCTGAATGAGCAGAATTGGGTGAACGTGACCAACTTG
CACAAGATGGGAGCACCCGAATCTGGCTTGGCAGAATATCTCTTTGACAAGCACACCCTGGGAGAAAAGAGGGAGC
ACTGGAATGTTTAATTCGGACAATGCCAATACAAGTTTACAGAGAAGAGAGAACATCATAAACAAAGGAGTGAATGT
TCTGCTGATTTTCAATGGGCAGAGGTGGAGGAACAGTCTGAGCAGAAGAAGAACATCATAAACAAAAGGAGTGAATGT
GAGAAAGGCTTCAGGTCCCATCAGAGTACTGCTTCACTTTGACTGTAGAAGATTTAGTTGAAGCAGTATTCAAA
AGTGTAGAACTTGTCAAGCTACCTATCCAGTCCTCTTGTCTTCTGAAACAGTGGTTACCTGCTCTGGAAAACCTT
CTCTCTCCATCCTCCAAAGCTCCTGGGGTACAGCTTTATCAGCGCACCTATCACACTGATTCTGGTCTCCAAAAA
CTCTTCTTGCTGAAAACAGCATACAAAATACTTTCCCTCTTCAAAGCCCCAATACAACACTGGAAAAGCAATGGAG
AAGAAAGTACTCAGTATCTTTTCCCCACTAAAAGTTGTACCACAACACTGGAGAGCCCTAGGT
TTATCAAAAGTATCTGCCATTTCTAAAAGAATGTTTCCCAGCAGAAGGCCCTAGCAAAAGCCCTGCACCA
AATTCCATTTGCTTTCCACACCCTGTCCCGACAAGGGGTGCTGCAGAAGGCCCAGATGCAATGAA

PCT/US2003/028547

FIGURE 1869

MTASNSQVRQNYHQDSEAAINRQINLELYASYFNLSMSYYFDRDDAALKNFAKYFLHQSHEEREHAEKLMKLQNQ QECALHLEKNVNQSLLELHKLATDKNDPHLCDFIETHYLNEQNWVNVTNLHKMGAPESGLAEYLFDKHTLGERGS TGMFNSDNANTSLQRRENFPLGFEGSADFQWAEVEEQSEQREHHKQRSECEKGFRSHQSTGFTLTVEDLVEAVFK SVELVKLPIQSSCLLKQWLPALENLLSPSSKAPGVQLYQRTYHTDSGLQKLFLLKTAYKILSLFKAQYNTGKAME KKVLSIFSPLKVVLQCLNTTGGALGLSKVSAISKRMCFQGIQKELFPTAPNSICFPHPVPTRGAAEAQSQPDA

PCT/US2003/028547

2034/6881 FIGURE 1870

 $\tt CGGACGCGTGGGCCGGTTCAGCC\underline{ATG} GGGACCTCTCCGAGCAGCAGCACCGCCCTCGCCTCCTGCAGCCGCATCG$ $\verb|CCCGCCGAGCCACAGCCACGATGATCGCGGGCTCCCTTCTCCTGCTTGGATTCCTTAGCACCACCACAGCTCAGC| \\$ CAGAACAGAAGGCCTCGAATCTCATTGGCACATACCGCCATGTTGACCGTGCCACCGGCCAGGTGCTAACCTGTG ACAAGTGTCCAGCAGGAACCTATGTCTCTGAGCATTGTACCAACACAAGCCTGCGCGTCTGCAGCAGTTGCCCTG TGGGGACCTTTACCAGGCATGAGAATGGCATAGAGAAATGCCATGACTGTAGTCAGCCATGCCCATGGCCAATGA TTGAGAAATTACCTTGTGCTGCCTTGACTGACCGAGAATGCACTTGCCCACCTGGCATGTTCCAGTCTAACGCTA CCTGTGCCCCCATACGGTGTGTCCTGTGGGTTGGGGTGTGCGGAAGAAAGGGACAGAGACTGAGGATGTGCGGT GTAAGCAGTGTGCTCGGGGTACCTTCTCAGATGTGCCTTCTAGTGTGATGAAATGCAAAGCATACACAGACTGTC TGAGTCAGAACCTGGTGGTGATCAAGCCGGGGACCAAGGAGACAACGTCTGTGGCACACTCCCGTCCTTCT CCAGCTCCACCTCACCTTCCCCTGGCACAGCCATCTTTCCACGCCCTGAGCACATGGAAACCCATGAAGTCCCTT CCTCCACTTATGTTCCCAAAGGCATGAACTCAACAGAATCCAACTCTTCTGCCTCTGTTAGACCAAAGGTACTGA CAAACCTTCAGGTAGTCAACCACCAGCAAGGCCCCCACCACAGACACATCCTGAAGCTGCTGCCGTCCATGGAGG CCACTGGGGGCGAGAAGTCCAGCACGCCCATCAAGGGCCCCAAGAGGGGACATCCTAGACAGAACCTACACAAGC ATTTTGACATCAATGAGCATTTGCCCTGGATGATTGTGCTTTTCCTGCTGCTGCTGCTTGTGGTGATTGTGGTGT GCAGTATCCGGAAAAGCTCGAGGACTCTGAAAAAGGGGCCCCGGCAGGATCCCAGTGCCATTGTGGAAAAGGCAG GGCTGAAGAAATCCATGACTCCAACCCAGAACCGGGAGAAATGGATCTACTGCAATGGCCATGGTATCGATA GGGAGGTTGCTGCTTTCTCCAATGGGTACACAGCCGACCACGAGCGGGCCTACGCAGCTCTGCAGCACTGGACCA TCCGGGGCCCCGAGCCAGCCTCGCCCAGCTAATTAGCGCCCTGCGCCAGCACCGGAGAAACGATGTTGTGGAGA AGATTCGTGGGCTGATGGAAGACACCACCCAGCTGGAAACTGACAAACTAGCTCTCCCGATGAGCCCCAGCCCGC TTAGCCCGAGCCCCATCCCCAGCCCCAACGCGAAACTTGAGAATTCCGCTCTCCTGACGGTGGAGCCTTCCCCAC AGGACAAGAACAAGGGCTTCTTCGTGGATGAGTCGGAGCCCCTTCTCCGCTGTGACTCTACATCCAGCGGCTCCT CCTGTGACTTGCAGCCTATCTTTGATGACATGCTCCACTTTCTAAATCCTGAGGAGCTGCGGGTGATTGAAGAGA TCCTGGACTCTGTTTATAGCCATCTTCCTGACCTGCTGTAGAACATAGGGATACTGCATTCTGGAAATTACTCAA CTCTCTTTTTTTTTAAATAACTCTTCTGGGAAGTTGGTTTATAAGCCTTTGCCAGGTGTAACTGTTGTGAAATA CCCACCACTAAAGTTTTTTAAGTTCCATATTTTCTCCATTTTTGCCTTCTTATGTATTTTCAAGATTATTCTGTGC ACTTTAAATTTACTTAACTTACCATAAATGCAGTGTGACTTTTCCCACACACTGGATTGTGAGGCTCTTAACTTC TTAAAAGTATAATGGCATCTTGTGAATCCTATAAGCAGTCTTTATGTCTCTTAACATTCACACCTACTTTTTAAA AACAAATATTATTACTATTTTTTATTATTGTTTGTCCTTTATAAATTTTCTTAAAGATTAAGAAAATTTAAGACCC CATTGAGTTACTGTAATGCAATTCAACTTTGAGTTATCTTTTAAATATGTCTTGTATAGTTCATATTCATGGCTG AAACTTGACCACACTATTGCTGATTGTATGGTTTTCACCTGGACACCGTGTAGAATGCTTGATTACTTGTACTCT TCTTATGCTAATATGCTCTGGGCTGGAGAAATGAAATCCTCAAGCCATCAGGATTTGCTATTTAAGTGGCTTGAC AACTGGGCCACCAAAGAACTTGAACTTCACCTTTTAGGATTTGAGCTGTTCTGGAACACATTGCTGCACTTTGGA AAGTCAAAATCAAGTGCCAGTGGCGCCCTTTCCATAGAGAATTTGCCCAGCTTTGCTTTAAAAGATGTCTTGTTT TTTATATACACATAATCAATAGGTCCAATCTGCTCTCAAGGCCTTGGTCCTGGTGGGATTCCTTCACCAATTACT TTAATTAAAAATGGCTGCAACTGTAAGAACCCTTGTCTGATATATTTTGCAACTATGCTCCCATTTACAAATGTAC ΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑ

PCT/US2003/028547

2035/6881 FIGURE 1871

MGTSPSSSTALASCSRIARRATATMIAGSLLLLGFLSTTTAQPEQKASNLIGTYRHVDRATGQVLTCDKCPAGTY VSEHCTNTSLRVCSSCPVGTFTRHENGIEKCHDCSQPCPWPMIEKLPCAALTDRECTCPPGMFQSNATCAPHTVC PVGWGVRKKGTETEDVRCKQCARGTFSDVPSSVMKCKAYTDCLSQNLVVIKPGTKETDNVCGTLPSFSSSTSPSP GTAIFPRPEHMETHEVPSSTYVPKGMNSTESNSSASVRPKVLSSIQEGTVPDNTSSARGKEDVNKTLPNLQVVNH QQGPHHRHILKLLPSMEATGGEKSSTPIKGPKRGHPRQNLHKHFDINEHLPWMIVLFLLLVLVVIVVCSIRKSSR TLKKGPRQDPSAIVEKAGLKKSMTPTQNREKWIYYCNGHGIDILKLVAAQVGSQWKDIYQFLCNASEREVAAFSN GYTADHERAYAALQHWTIRGPEASLAQLISALRQHRRNDVVEKIRGLMEDTTQLETDKLALPMSPSPLSPSPIPS PNAKLENSALLTVEPSPQDKNKGFFVDESEPLLRCDSTSSGSSALSRNGSFITKEKKDTVLRQVRLDPCDLQPIF DDMLHFLNPEELRVIEEIPQAEDKLDRLFEIIGVKSQEASQTLLDSVYSHLPDLL

PCT/US2003/028547

2036/6881 FIGURE 1872

CCGGGGACTCGCATTCCCCGGTTCCCCCTCCACCCCACGCGGCCTGGACCATGGACGCAGATGGTGGGCAGTGG TGGTGCTGGCTGCGTTCCCCTAGGGGCAGGTGGGGAGACTCCCGAAGCCCCTCCGGAGTCATGGACCCAGC TATGGTTCTTCCGATTTGTGGTGAATGCTGCTGGCTATGCCAGCTTTATGGTACCTGGCTACCTCCTGGTGCAGT ACTTCAGGCGGAAGAACTACCTGGAGACCGGTAGGGGCCTCTGCTTTCCCCTGGTGAAAGCTTGTGTTTTGGCA ATGAGCCCAAGGCCTCTGATGAGGTTCCCCTGGCGCCCCGAACAGAGGCGGCAGAGACCACCCCGATGTGGCAGG CCCTGAAGCTGCTCTTCTGTGCCACAGGGCTCCAGGTGTCTTATCTGACTTGGGGTGTGCTGCAGGAAAGAGTGA TGACCCGCAGCTATGGGGCCACAGCCACATCACCGGGTGAGCGCTTTACGGACTCGCAGTTCCTGGTGCTAATGA ACCGAGTGCTGGCACTGATTGTGGCTGGCCTCTCCTGTGTTCTCTGCAAGCAGCCCCGGCATGGGGCACCCATGT ACCGGTACTCCTTTGCCAGCCTGTCCAATGTGCTTAGCAGCTGGTGCCAATACGAAGCTCTTAAGTTCGTCAGCT TCCCCACCCAGGTGCTGGCCAAGGCCTCTAAGGTGATCCCTGTCATGCTGATGGGAAAGCTTGTGTCTCGGCGCA GCTACGAACACTGGGAGTACCTGACAGCCACCCTCATCTCCATTGGGGTCAGCATGTTTCTGCTATCCAGCGGAC CAGAGCCCCGCAGCTCCCCAGCCACCACTCTCAGGCCTCATCTTACTGGCAGGTTATATTGCTTTTGACAGCT TCACCTCAAACTGGCAGGATGCCCTGTTTGCCTATAAGATGTCATCGGTGCAGATGATGTTTGGGGTCAATTTCT TCTCCTGCCTCTCACAGTGGGCTCACTGCTAGAACAGGGGGCCCTACTGGAGGGAACCCGCTTCATGGGGCGAC ACAGTGAGTTTGCTGCCCATGCCCTGCTACTCTCCATCTGCTCCGCATGTGGCCAGCTCTTCATCTTTTACACCA TTGGGCAGTTTGGGGCTGCCGTCTTCACCATCATCATGACCCTCCGCCAGGCCTTTGCCATCCTTCTTTCCTGCC TTCTCTATGGCCACACTGTCACTGTGGTGGGAGGGCTGGGGTGGCTGTGGTCTTTGCTGCCCTCCTGCTCAGAG GGTGGAAAGGGCCTGAGGGGTGAAGTGAAATAGGACCCTCCCACCATCCCCTTCTGCTGTAACCTCTGAGGGAGC TGGCTGAAAGGGCAAAATGCAGGTGTTTTCTCAGTATCACAGACCAGCTCTGCAGCAGGGGATTGGGGAGCCCAG GAGGCAGCCTTCCCTTTTGCCTTAAGTCACCCATCTTCCAGTAAGCAGTTTATTCTGAGCCCCGGGGGTAGACAG CTGGTGAGAAAAGCACAAGCGGTGTAGGCTCCAATGCTGCTTTCCCAGGAGGGTGAAGATGGTGCTGTGCTGAGG AAAGGGGATGCAGAGCCCTGCCCAGCACCACCTCCTATGCTCCTGGATCCCTAGGCTCTGTTCCATGAGCCT

PCT/US2003/028547

2037/6881 FIGURE 1873

MDARWWAVVULAAFPSLGAGGETPEAPPESWTQLWFFRFVVNAAGYASFMVPGYLLVQYFRRKNYLETGRGLCFP LVKACVFGNEPKASDEVPLAPRTEAAETTPMWQALKLLFCATGLQVSYLTWGVLQERVMTRSYGATATSPGERFT DSQFLVLMNRVLALIVAGLSCVLCKQPRHGAPMYRYSFASLSNVLSSWCQYEALKFVSFPTQVLAKASKVIPVML MGKLVSRRSYEHWEYLTATLISIGVSMFLLSSGPEPRSSPATTLSGLILLAGYIAFDSFTSNWQDALFAYKMSSV QMMFGVNFFSCLFTVGSLLEQGALLEGTRFMGRHSEFAAHALLLSICSACGQLFIFYTIGQFGAAVFTIIMTLRQ AFAILLSCLLYGHTVTVVGGLGVAVVFAALLLRVYARGRLKQRGKKAVPVESPVQKV WO 2004/030615 PCT/US2003/028547

2038/6881 FIGURE 1874

CTTTTCAAGATGCCTGAGGAAGTGCACCATGGAGAGGAGGAGGAGGAGACTTTTGCCTTTCAGGCAGAAATTGCC CAACTCATGTCCCTCATCATCAATACCTTCTATTCCAACAAGGAGATTTTCCTTCGGGAGTTGATCTCTAATGCT TCTGATGCCTTGGACAAGATTCGCTATGAGAGCCTGACAGACCCTTCGAAGTTGGACAGTGGTAAAGAGCTGAAA ATTGACATCATCCCCAACCCTCAGGAACGTACCCTGACTTTGGTAGACACAGGCATTGGCATGACCAAAGCTGAT CTCATAAATAATTTGGGAACCATTGCCAAGTCTGGTACTAAAGCATTCATGGAGGCTCTTCAGGCTGGTGCAGAC ATCTCCATGATTGGGCAGTTTGGTGTTGGCTTTTATTCTGCCTACTTGGTGGCAGAGAAAGTGGTTGTGATCACA GTCAAAGAAGTAGTGAAGAAGCATTCTCAGTTCATAGGCTATCCCATCACCCTTTATTTGGAGAAGGAACGAGAG CCCAAGATCGAAGATGTGGGTTCAGATGAGGAGGATGACAGCGGTAAGGATAAGAAGAAGAAACTAAGAAGATC AAAGAGAAATACATTGATCAGGAAGAACTAAACAAGACCAAGCCTATTTGGACCAGAAACCCTGATGACATCACC CAAGAGGAGTATGGAGAATTCTACAAGAGCCTCACTAATGACTGGGAAGACCACTTGGCAGTCAAGCACTTTTCT GTAGAAGGTCAGTTGGAATTCAGGGCATTGCTATTTATTCCTCGTCGGGCTCCCTTTGACCTTTTTGAGAACAAG AAGAAAAAGAACAACATCAAACTCTATGTCCGCCGTGTGTTCATCATGGACAGCTGTGATGAGTTGATACCAGAG TATCTCAATTTTATCCGTGGTGTGGTTGACTCTGAGGATCTGCCCCTGAACATCTCCCGAGAAATGCTCCAGCAG AGCAAAATCTTGAAAGTCATTCGCAAAAACATTGTTAAGAAGTGCCTTGAGCTCTTCTCTGAGCTGGCAGAAGAC AAGGAGAATTACAAGAAATTCTATGAGGCATTCTCTAAAAATCTCAAGCTTGGAATCCACGAAGACTCCACTAAC $\tt CGCCGCCGCCTGTCTGAGCTGCGCTATCATACCTCCCAGTCTGGAGATGAGATGACATCTCTGTCAGAGTAT$ GTTTCTCGCATGAAGGAGACACAGAAGTCCATCTATTACATCACTGGTGAGAGCAAAGAGCAGGTGGCCAACTCA GCTTTTGTGGAGCGAGTGCGGAAACGGGGCTTCGAGGTGGTATATATGACCGAGCCCATTGACGAGTACTGTGTG CAGCAGCTCAAGGAATTTGATGGGAAGAGCCTGGTCTCAGTTACCAAGGAGGGTCTGGAGCTGCCTGAGGATGAG AAGAAGGTTGAGAAGGTGACAATCTCCAATAGACTTGTGTCTTCACCTTGCTGCATTGTGACCAGCACCTACGGC TGGACAGCCAATATGGAGCGGATCATGAAAGCCCAGGCACTTCGGGACAACTCCACCATGGGCTATATGATGGCC AAAAAGCACCTGGAGATCAACCCTGACCACCCCATTGTGGAGACGCTGCGGCAGAAGGCTGAGGCCGACAAGAAT GATAAGGCAGTTAAGGACCTGGTGGTGCTGTTTGAAACCGCCCTGCTATCTTCTGGCTTTTCCCTTGAGGAT CCCCAGACCCACTCCAACCGCATCTATCGCATGATCAAGCTAGGTCTAGGTATTGATGAAGATGAAGTGGCAGCA GAGGAACCCAATGCTGCAGTTCCTGATGAGATCCCCCCTCTCGAGGGCGATGAGGATGCGTCTCGCATGGAAGAA ${\tt GTCGAT} \underline{{\tt TAG}} {\tt GTTAGGAGTTCATAGTTGGAAAACTTGTGCCCTTGTATAGTGTCCCCATGGGCTCCCACTGCAGCC}$ GGCAGTAAACTAAGGGTGTCAAGCCCCATTCCCTCTCTACTCTTGACAGCAGGATTGGATGTTGTATTGTGGT AAAAAAAAAAAAAA

PCT/US2003/028547

2039/6881 FIGURE 1875

MPEEVHHGEEEVETFAFQAEIAQLMSLIINTFYSNKEIFLRELISNASDALDKIRYESLTDPSKLDSGKELKIDI
IPNPQERTLTLVDTGIGMTKADLINNLGTIAKSGTKAFMEALQAGADISMIGQFGVGFYSAYLVAEKVVVITKHN
DDEQYAWESSAGGSFTVRADHGEPIGRGTKVILHLKEDQTEYLEERRVKEVVVKKHSQFIGYPITLYLEKEREKEI
SDDEAEEEKGEKEEEDKDDEEKPKIEDVGSDEEDDSGKDKKKKTKKIKEKYIDQEELNKTKPIWTRNPDDITQEE
YGEFYKSLTNDWEDHLAVKHFSVEGQLEFRALLFIPRRAPFDLFENKKKKNNIKLYVRRVFIMDSCDELIPEYLN
FIRGVVDSEDLPLNISREMLQQSKILKVIRKNIVKKCLELFSELAEDKENYKKFYEAFSKNLKLGIHEDSTNRRR
LSELLRYHTSQSGDEMTSLSEYVSRMKETQKSIYYITGESKEQVANSAFVERVRKRGFEVVYMTEPIDEYCVQQL
KEFDGKSLVSVTKEGLELPEDEEEKKKMEESKAKFENLCKLMKEILDKKVEKVTISNRLVSSPCCIVTSTYGWTA
NMERIMKAQALRDNSTMGYMMAKKHLEINPDHPIVETLRQKAEADKNDKAVKDLVVLLFETALLSSGFSLEDPQT
HSNRIYRMIKLGLGIDEDEVAAEEPNAAVPDEIPPLEGDEDASRMEEVD

PCT/US2003/028547

2040/6881 FIGURE 1876

GGGCTGCGCTCTCCAGCTGTGGCTATGGCCCCAGCCCCGAGATGAGGAGGAGAAACTAGGGGCCCGCAGGCCT GCCAGGGAAAACCGAGACACCATCACCATGACAACCAGTCACCAGCCTCAGGACAGATACAAAGCTGTCTGGCT TATCTTCTTCATGCTGGGTCTGGGAACGCTGCTCCCGTGGAATTTTTTCATGACGGCCACTCAGTATTTCACAAA CCGCCTGGACATGTCCCAGAATGTGTCCTTGGTCACTGCTGAACTGAGCAAGGACGCCCAGGCGTCAGCCGCCCC TGCAGCACCCTTGCCTGAGCGGAACTCTCTCAGTGCCATCTTCAACAATGTCATGACCCTATGTGCCATGCTGCC CCTGCTGTTATTCACCTACCTCAACTCCTTCCTGCATCAGAGGATCCCCCAGTCCGTACGGATCCTGGGCAGCCT GGTGGCCATCCTGCTGGTGTTTCTGATCACTGCCATCCTGGTGAAGGTGCAGCTGGATGCTCTGCCCTTCTTTGT CCTTCTGCCTGCCAGCTACACGGCCCCCATCATGAGTGGCCAGGGCCTAGCAGGCTTCTTTGCCTCCGTGGCCAT GATCTGCGCTATTGCCAGTGGCTCGGAGCTATCAGAAAGTGCCTTCGGCTACTTTATCACAGCCTGTGCTGTTAT CATTTTGACCATCATCTGTTACCTGGGCCTGCCCCGCCTGGAATTCTACCGCTACTACCAGCAGCTCAAGCTTGA AGGACCCGGGGAGCAGGAGCCAAGTTGGACCTCATTAGCAAAGGAGGAGCCAAGAGCAGGCAAAGAGGAATC TGGAGTTTCAGTCTCCAACTCTCAGCCCACCAATGAAAGCCACTCTATCAAAGCCATCCTGAAAAATATCTCAGT CCTGGCTTTCTCTGTCTGCTTCATCTTCACTATCACCATTGGGATGTTTCCAGCCGTGACTGTTGAGGTCAAGTC CAGCATCGCAGGCAGCACCTGGGAACGTTACTTCATTCCTGTGTCCTGTTTCTTGACTTTCAATATCTTTGA GGCCCGGCTGGTGTTTGTGCCACTGCTGCTGCTGCAACATTAAGCCCCGCCGCTACCTGACTGTGGTCTTCGA GCACGATGCCTGGTTCATCTTCTTCATGGCTGCCTTTGCCTTCTCCAACGGCTACCTCGCCAGCCTCTGCATGTG CTTCGGGCCCAAGAAGTGAAGCCAGCTGAGGCAGAGACCGCAGGAGCCATCATGGCCTTCTTCCTGTGTCTGGG TCTGGCACTGGGGGCTGTTTTCTCCTTCCTGTTCCGGGCAATTGTGTGACAAAGGATGGACAGAAGGACTGCCTG CCTCCCTCCCTGTCTGCCTCCTTCCTTCTGCCAGGGGTGATCCTGAGTGGTCTGGCGGTTTTTTCTTCT GTGGGGACATTGTGGGTTTGGGGCTCAGAGTCGAGGGACGGGGTGTAGCCTCGGCATTTGCTTGAGTTTCTCCAC TCTTGGCTCTGACTGATCCCTGCTTGTGCAGGCCAGTGGAGGCTCTTGGGCTTGGAGAACACGTGTGTCTCTGTG TATGTGTCTGTGTGTCTGCGTCCGTGTCTGTCAGACTGTCTGCCTGTCCTGGGGTGGCTAGGAGCTGGGTCTGAC CGTTGTATGGTTTGACCTGATATACTCCATTCTCCCCTGCGCCTCCTCTGTGTTCTCTCCATGTCCCCCTCC CAACTCCCCATGCCCAGTTCTTACCCATCATGCACCCTGTACAGTTGCCACGTTACTGCCTTTTTTAAAAATATA

PCT/US2003/028547

2041/6881 FIGURE 1877

PCT/US2003/028547

FIGURE 1878

PCT/US2003/028547

FIGURE 1879

TACCCCTTCATGCTCCAGTGCACCCCAGGCTTCGTGGCCAGCCTGGGAAACTGTCTCTACCCTGGTCTCCCTTCA GATCAGCTTCTAGAAATGTTTCGTGGCTACAGTGGCAGCACTGTTTTTTCCATGATGCAAGCAGTTTGCCCTCTT GGGCGGGGTTATCAGTGGCTGGCAGGGCTGGCACAGCGTGTCCGCCCACTGCCACCTGTGGGTTCCAGGAGGGCC CAGCCCCTGTGCTGATGCCCACCACCTTCTCAGCTCATGTCTGGGGAAGAGGACTGGCAGGGGGAAAGGTGCCTC CTCCTGAAAGGTGCCTCCTCTGTTTTTGCCTAATATAGGCTTGGGAACACTTTGATGTCAGCTAATTCTGACTCC TTTACTTACTAGCTGTGCGGCCTTGGGGCAACTTACTTAGCCTCTTTGAGCCTCCTGTTCCCCATCTGTAAAATG GAATCTCAATAGTGTCTAATAGTACCATGTGGAGAAACTTGTGTGAAATGATAGCTGTGGACTACTGTACACAGT ACTCAGGATGTAGTAAGTGCTCAATAAACAGCTGTTGGTATGGTTGACGTTATGGTAGTGGTTGTGGGGGAGGACG TAGGAAACTGGAGACTAGCTTGGCAAAGCTGGCTCTTCCTCCTTTTAGGGAAAGCTTAGAGCATCCCCATGGGGT ATACCCATACTCAGACTGTCCTCTGGCATCGAGGTTGGCCCAGGATTCAGTTCAGCTGTCACAGTGAGGTGGCGG GATCAGATGTGGCAGGCCATGTCCCTTGGAACTTGAGTACATCGTGTGATCTCTGGAATGAAAACAGGCCTTCAC CAGTGTTGATGGTGGAAAGCTTAGGGAAGTGCTTCAAACACAGTAGGAGGACTTACGTTAGATTTTGGAAGGAC TTGCCTGATTCGGAAGCTCCAAAGAGTGGCATTACAGAGCTGGGTGGAGAGAGGGGCTAGCCATCTTTTGTGTCG TCCAATCGAGACCCTGGTGGACATCTTCCAGGAGTACCCTGATGAGATCGAGTACATCTTCAAGCCATCCTGTGT GCCCTGATGCGATGCGGGGCTGCTGCAATGACGAGGGCCTGGAGTGTGTGCCCACTGAGGAGTCCAACATCAC CCCAGGTCGTTTCCTGGCTAGATTTGCCTTGTCTGGCTCCTGCCCCTGAGTTGCACAGGGGAGGTATGGTGGGGT TGGTTGCCCATGGGCTCAGGAGGGGACAGATGGATGCCTGTGTCAGGAGCCCCTCTCTCCCCTCTTTGGAGAGAG TCCTGAGTGCCCCCCTTCTTGGGGGCTTTGTTTGGGAAGCTGGATGAGCCTGGTCCATGGAGAGTTTAAAAAGT GGTTGCTTTCGGGTATCTACTAGGAGTCAGGGTGAAGCCTAGAGAGGGATGAAAGAAGGGGAGGGGATGGGGAGTG GTAAGAACCTAGGATTTGAATTCCCAGCCTGGCCAACCCTTGCAGCCATGTCTTGGCCTCAAGTGGAACAAGGGC TCCTTGAGGCCAGCAGGGTTGGGGGTGGGCCTGAGCCTCTTTCCTGCTAGAGCTCTTGGTCCTCCT GCCTCCACCACCCATCCCTGCTCTGCAGAACCCCTGGGTGCTGAGTGGCAGGAGCCCCAGGGTTGTCCCATCTGG GGCCAGCACATAGGAGAGATGAGCTTCCTACAGCACAACAAATGTGAATGCAGGTGAGGATGTAGTCACGGATTC ATTATCAGCAAGTGGCTGCAGGGTGCCTGATCTGTGCCAGGGTTAAGCATGCTGTACTTTTTGGCCCCCGTCCAG CTTCCCGCTATGTGACCTTTGGCATTTTACTTCAATGTGCCTCAGTTTCTACATCTGTAAAATGGGCACAATAGT AGTATACTTCATAGCATTGTTATAATGATTAAACAAGTTATATATGAAAAGATTAAAACAGTGTTGCTCCAT

PCT/US2003/028547

2044/6881 FIGURE 1880

PCT/US2003/028547

2045/6881 FIGURE 1881

MAALKALVSGCGRLLRGLLAGPAATSWSRLPARGFREVVETQEGKTTIIEGRITATPKESPNPPNPSGQCPICRW NLKHKYNYDDVLLLSQFIRPHGGMLPRKITGLCQEEHRKIEECVKMAHRAGLLPNHRPRLPEGVVPKSKPQLNRY LTRWAPGSVKPIYKKGPRWNRVRMPVGSPLLRDNVCYSRTPWKLYH

PCT/US2003/028547

2046/6881 FIGURE 1882A

AGCTGTCGTGCCTCGTGGTCCCGGGACTGCAGTGGTGTGCGCTCTCGGCGCGTGGCGCTAGGCATGGCGATGGAT CAAGTAAACGCGCTGTGCGAGCAGCTGGTGAAAGCGGTGACGGTCATGATGGACCCCAACTCCACCCAGCGCTAC CGGCTGGAAGCCCTCAAGTTTTGTGAGGAGTTTAAAGAAAAGTGTCCTATCTGTGTCCCCTGTGGCTTGAGGTTG GCTGAGAAAACACAAGTTGCCATCGTCAGACATTTTGGCCTTCAGATCCTGGAACACGTTGTCAAGTTTCGGTGG AACGGCATGTCTCGATTGGAGAAGGTGTATCTGAAGAACAGTGTCATGGAGCTGATTGCAAATGGAACATTGAAC ATTTTGGAAGAGGAGAACCATATTAAAGATGCTCTGTCTCGAATTGTAGTGGAAATGATCAAGCGAGAGTGGCCA TTTATCCTTTTGCGACTGGCAGAGGATGTAGTGACTTTTCAGACACTTCCCCCTCAAAGAAGAAGAGGGACATCCAG CAAACATTAACCCAGAACATGGAAAGGATCTTCAGTTTTCTGCTTAACACACTTCAAGAAAATGTAAACAAGTAT ACTCTAGCAGGCTATATTGACTGGGTGTCTATGAGTCACATCACTGCTGAAAACTGTAAACTCCTGGAGATACTG TGTTTGCTGTTGAATGAACAGGAACTTCAGTTGGGAGCCGCTGAGTGTCTTCTCATTGCAGTCAGCAGAAAAGGC AAGTTGGAAGACCGGAAGCCCTTGATGGTCTTATTTGGAGATGTTGCCATGCATTATATACTCTCCGCCGCACAG ACTGCTGATGGAGGAGGTTTGGTAGAAAAACACTACGTCTTTCTGAAGAGGCTCTGTCAGGTGTTGTGTGCGCTG GGCAATCAGCTGTGCATTGCTGGGTGCAGATTCTGATGTAGAAACACCATCAAACTTTGGAAAATACCTGGAA TCTTTCTTGCTTTCACAACCCATCCAAGTCAGTTTCTACGCTCTTCAACTCAGATGACTTGGGGAGCCCTCTTC AGGCATGAAATCCTGTCCCGTGATCCTTTGCTATTAGCAATAATACCAAAATATCTTCGTGCTTCCATGACTAAC TTGGTCAAGATGGGCTTTCCTTCTAAAACAGACAGCCCTAGCTGTGAATATTCTCGGTTTGATTTTGATAGCGAT GAGGACTTCAATGCTTTCTTCAACTCCTCCCGAGCACAACAAGGAGAGGTGATGAGGTTGGCATGTCGTTTGGAT CCCAAAACTAGCTTCCAGATGGCTGGGGAGTGGCTAAAGTATCAACTATCAACTTTTCTTGATGCTGGTTCTGTG AATTCTTGTTCTGCAGTTGGAACTGGAGAAGGAAGCCTCTGTTCCGTCTTCTCACCTTCATTCGTGCAGTGGGAA GCCATGACTCTTTTTTTGGAAAGTGTTATCACCCAGATGTTTCGAACACTAAATAGAGAAGAAATTCCTGTTAAT GATGGAATAGAGCTATTGCAGATGGTTCTGAACTTTGATACCAAGGATCCCCTCATCCTGTCCTGCGTCCTTACT AATGTCTCTGCACTCTTTCCATTTGTCACCTACAGACCAGAGTTCCTGCCCCAGGTCTTCTCTAAGCTATTTTCA TCTGTCACTTTTGAAACTGTTGAAGAAGTAAGGCCCCCAGAACCCGGGCAGTGAGGAATGTGAGGAGGCATGCT TGTTCCTCCATCATCAAGATGTGTCGTGACTACCCCCAGCTTGTGCTGCCCAATTTTGACATGCTTTATAACCAT GTGAAGCAACTCCTCCAATGAGCTACTCCTGACACAAATGGAGAGTGTGCCCTCATGGAAGCCCTGGTTCTC ATTAGCAACCAATTTAAGAACTACGAGCGTCAGAAGGTGTTCCTAGAGGAGCTGATGGCACCAGTGGCCAGCATC TGGCTTTCTCAAGACATGCACAGAGTGCTGTCAGATGTTGATGCTTTCATTGCGTATGTGGGTACAGATCAGAAG AGCTGTGACCCAGGCCTGGAGGATCCGTGTGGCTTAAACCGTGCACGAATGAGCTTTTGTGTATACAGCATTCTG GGTGTGGTGAAACGAACTTGCTGGCCCACTGACCTAGAAGAGGCCCAAAGCTGGGGGATTTGTGGTGGGTTATACA ATAAGAACCCACAATACATTATATGCACCAGAAATGCTAGCCAAAATGGCAGAGCCTTTCACCAAGGCTCTGGAT ATGCTTGACGCGGAAAATCTGCTATATTAGGATTACCTCAACCTCTCTTGGAACTCAATGACTCTCTGTCTTC AAAACCGTCTTGGAAAGAATGCAGCGTTTCTTCTCTACCCTCTATGAAAACTGTTTTCATATCCTAGGGAAGGCA GGCCCTTCCATGCAGCAAGACTTCTATACTGTGGAGGACCTTGCTACCCAGCTTCTCAGCTCAGCCTTTGTCAAC TTGAACAATATTCCTGACTACCGACTCAGACCCATGCTTCATGTCTTTGTAAAGCCTCTGGTGCTCTTCTGTCCC AAATGGCAAGTTATCAACCAAAGGAGCCTGCTGTGTGGAGAAGATGAGGCTGCAGATGAAAACCCAGAGTCTCAA GAGATGCTGGAGGAGCAACTGGTGAGGATGTTAACCCGAGAAGTCATGGACCTAATCACGGTTTGCTGTTTTCA AAGAAGGGTGCTGACCACAGTAGTGCTCCCCCAGCAGATGGAGACGATGAAGAAATGATGGCCACAGAGGTCACC CCCTCAGCTATGGCAGAGCTTACAGACCTGGGCAAATGTCTGATGAAGCATGAGGATGTTTGTACAGCGCTATTA ATTACAGCCTTCAATTCCCTGGCCTGGAAAGATACTCTGTCCTGCCAGAGGACAACCTCACAGCTCTGCTGGCCT CTCCTCAAACAAGTGCTGTCAGGGACACTGCTCGCAGATGCAGTTACGTGGCTTTTCACCAGTGTGCTGAAAGGC TTACAGATGCACGGCCACGACGGGTGCATGGCTTCCCTGGTCCATCTGGCCTTCCAGATATACGAGGCACTG CGCCCCAGGTACCTGGAGATAAGAGCTGTAATGGAGCAAATCCCTGAAATACAGAAGGACTCACTGGACCAGTTT GACTGCAAGCTTTTAAACCCCTCCCTGCAGAAAGTGGCTGACAAGCGCCGAAAGGACCAATTCAAACGCCTCATT GCTGGTTGCATTGGGAAACCCTTGGGAGAGCAGTTCCGAAAAGAAGTTCACATTAAGAATCTTCCCTCACTTTTC

PCT/US2003/028547

2047/6881 FIGURE 1882B

AAAAAAACAAAGCCAATGCTGGAGACGGAGGTGCTGGACAATGATGGGGGGTGGCCTGGCCACCATCTTTGAACCC CCTTCTTGCACTGCCACCTCACTTTCCACCACTGTCAGCCTGGAAAGAGATCCAGGTCTGGAGCTGGAGAAACA GGCCCTGTGCAGGACCAGAAGTAATTATACTAAAGTATCAAGAAAGGGAGTTAGGGCTTAAACTATTCTGTCTAG ATGTCCCAGATAGTTCCCATTCTACTTGGAGATTTGGCTTTTCCAAGAAAAGCTAGAGCAGAGCAGCCCTTCTCC CACAAGCCCTCCCACCCCGTGCAGCCACATACCTGTACAGAATGGTAACTAAGGGTGCTGTGCCCAACCCTGCG ACTAGCAAGGCTCGCAGCAGAGAGCACAGCCCTCAACTACTTGTGCCAGAGTTTCTCTTGGACCACTCCAACTCCC ${\tt ACTGAGCCCTTTTGCTGCTGGGCTGGCAGGAAACTTTCCCCACTCCCTAAGGGGCATGTCTGGGTTAGGTGCTAA}$ GTGCTGAAGAGAACTTGGTCAGTTCTCTCAACTTTGCTTTGGGCAAGAATCTGGTCACCTGATGGGATCCATGGT ACAGGCTACTGCTAAACTTGGCACAGTATCAAGTATAGTACCTCCAAGGACCAGGGCTGGGAAGTCTTTAGTGCT CCACTCAGGCACAAGAGCCACAGTACCCTAGATAGTGTCACATGACACCGTTGTCATCCAAGGATAATACAGACC AACTAGGCTACATCTGTGATGAGCAGCTAGCAAAGCCGCTGGTCTTCTCCTAGGACTAAGTCCAGGTGCCTTCCA CAATCTCATGGTCTTTCAGGTCCCTGGTTACTTTTCTCAAAGGCCATTTCCAAAAGAATACATGCCTTCACATCA CAACCTGTACTGTGAGTCCATTCTAGAGGTCACTGAAAGGCCCTGTAAAGAGAGGACATGGATACGGGACCTGGC CCTGAGGTTATTACTGGCCGTAAGGCAGAGTTAATCCATACAGAAACCAGTGTGTCCATGTGCTCTGCACAAAAA CAGACCTGTTGTCCATCCAGTCCACTGACAAGAGGGTTTCCCCGAGAGCCGAAGTGGACTGAAGCTACAGTTTTT ${\tt AGCTGGTGCGGGCCACAGGCAGGGTCAGATTGAGAAGCAAAGCTGGGGAAGCAGAAGTTGGGAGTCTTGTGT}$ TGCTCCCTCTTCCTGTGTGGTGCTCTGGGTTTCTGTGGATCGTGAAGGCGATCTCAAGAGTGTTTCCCTCCAAAC CATCCTGTGACTTCATGCTAGAAATTTTCTATTGTTTATAGAAACTTTTTGTAGAAACATTAACTCTAAAGCACA TCTGCATGTCAGTAAAAATCTCAGTTTCGTACAG

PCT/US2003/028547

2048/6881 FIGURE 1883

CACCAAATGGCGGATGACGCCGGTGCAGTGGGGGGGCCTGGAGGCCCTGGTGGCCCTGGGATGGGGAACCGCGGT
GGCTTCCGCAGAGGTTTCGCCAGTGGCATCCGGGGCCGGGGCCGGGGTCGCAGCCGTGACCGGGCCGGGCTGAGGCCGC
GGAGCTCGCGGAGGCAAGGCCAAAGATAAGGAGTGGATGCCCGTCACCAAGCTGGGCCGCTTGGTCAAGGACATG
AAGATCAAGTCCCTGGAGGAGATCTATCTCTTCTCCCTGCCCATTAAGGAATCAGAGATCATTGACTTTTTCCTG
GGGGCCTCTCTCAAGGATGAGGTTTTGAAGATTATGCCAGTGCAGAAGCAGACCCGTGCTGGCCAGCGCACCAGG
TTCAAGGTGACAGGCCGCCGTGGCTCTGTGCTGGTGCGCCTCATCCCTGCACCCAGGGCACCTGCC
GCACCTGTGCCCAAGAAGCTGCTCATGATGGCTGGTATCGATGACTGCTACACCTCAGCCCAGGGCTGCACTCGC
ACCCTGGGCAACTTCGCCAAGGCCACCTTTGATGCCATTTCTAAGACCTACAGCTACCTGACCCCCGACCTCTGG
AAGGAGACTGTATTTACCAAGTCTCCCTATCAGGAATTCACTGACCACCTCGTCAAGACCCACCACCAGAGTCTCT
GTGCAGCAGACCCAGGCTCCAGCTGTGGCTACAACATAGGGTTTTTATACAAGAAAAAATAAAGTGAATTAAGCGT

PCT/US2003/028547

2049/6881 FIGURE 1884

CGCGGAGCTCGCGGAGGCAAGGCCAAAGATAAGGAGTGGATCCCCGTCACCAAGCTGGGCCGCTTGGTCAAGGAC
ATGAAGATCAAGTCCCTGGAGGAGATCTATCTCTTCTCCCTGCCCATTAAGGAATCAGAGATCATTGACTTTTTC
CTGGGGGCCTCTCTCAAGGATGAGGTTTTGAAGATTATGCCAGTGCAGAAGCAGACCCGTGCTGGCCAGCGCACC
AGGGCTCTCCATTGTCCCCGTGCACAGAGGCTACTAGGGGAACAAGATCGGCAAGCCCCACACCGTCCCTGCAA
GGTGACAGGCCGCCGTGGCTCTGTGCTGGTGCGCCTCATCCCTGCACCCAGGGCACTGGCATTGTCTCCGCACC
TGTGCCCAAGAAGCTGCCATTTCTAAGACCTACAGCTACCTGACCCCCGACCTCTGGAAGGAGACTGTATTTACC
AAGTCTCCCTATCAGGAATTCACTGACCACCTCGTCAAGACCCACACCAGAGTCTCTGTGCAGCAGACCCAGGCT
CCAGCTGTGGCTACAACATAGGGTTTTTATACAAGAAAAATAAAGTGAATTAAGCGTG

PCT/US2003/028547

2050/6881 FIGURE 1885

 ${\tt MPVTKLGRLVKDMKIKSLEEIYLFSLPIKESE\\ \verb||IDFFLGDSLKDEVLKIMPVQKQTRAGQRTRLHCPRAQRLLGE|\\ QDRQAPHRPLQGDRPLRLCAGAPHPCTQGHWHRLRTCAQELMPSLRPTAT|\\$

PCT/US2003/028547

2051/6881 FIGURE 1886

GTGTTCCGGCCGATCCCACCTCTTCTCGACCCTGGACGTCTACCTTCCGGAGGCCCACATCTTGCCCACTCCGCG ${\tt CGCGGGGCTAGCGCGGGTTTCAGCGACGGGAGCCCTCAAGGGAC}$ CCCGAAATGGAGCTGGCCCGGAATGGGGAGGGTTCGAAGAAAACATCCAGGGCGGAGGCTCAGCTGTGATTGACA TGGAGAACATGGATGATACCTCAGGCTCTAGCTTCGAGGATATGGGTGAGCTGCATCAGCGCCTGCGCGAGGAAG AAGTAGACGCTGATGCAGCTGATGCAGCTGCTGAAGAGGAGGATGGAGAGTTCCTGGGCATGAAGGGCTTTA AGGGACAGCTGAGCCGGCAGGTGGCAGATCAGATGTGGCAGGCTGGGAAAAGACAAGCCTCCAGGGCCTTCAGCT TGTACGCCAACATCGACATCCTCAGACCCTACTTTGATGTGGAGCCTGCTCAGGTGCGAAGCAGGCTCCTGGAGT CCATGATCCCTATCAAGGTGGTCAACTTCCCCCAGAAAATTGCAGGTGAACTCTATGGACCTCTCATGCTGGTCT TCACTCTGGTTGCTATCCTACTCCATGGGATGAAGACGTCTGACACTATTATCCGGGAGGGCACCCTGATGGGCA CAGCCATTGGCACCTGCTTCGGCTACTGGCTGGGAGTCTCATCCTTCATTTACTTCCTTGCCTACCTGTGCAACG CCCAGATCACCATGCTGCAGATGTTGGCACTGCTGGGCTATGGCCTCTTTGGGCATTGCATTGTCCTGTTCATCA TAGCAGTGTTGGTGTCTCGGACCGTGGGCCCCACACAGCGGCTGCTCCTCTGTGGCACCCTGGCTGCCCTACACA TGCTCTTCCTGCTCTATCTGCATTTTGCCTACCACAAAGTGGTAGAGGGGATCCTGGACACACTGGAGGGCCCCA ACATCCCGCCCATCCAGAGGGTCCCCAGAGACATCCCTGCCATGCTCCCTGCTGCTCGGCTTCCCACCACCGTCC ${\tt TCAACGCCACAGCCAAAGCTGTTGCGGTGACCCTGCAGTCACAC{\tt TGACCCCACCTGAAATTCTTGGCCAGTCCTC}}$ TTTCCCGCAGCTGCAGAGAGGGAGGAAGACTATTAAAGGACAGTCCTGATGACATGTTTCGTAGATGGGGTTTGCA GCTGCCACTGAGCTGTGGCTGAGTACCTCCTTGATGCCTGTCGGCACTTCTGAAAGGCACAAGGCCAAGAA CTCCTGGCCAGGACTGCAAGGCTCTGCAGCCAATGCAGAAAATGGGTCAGCTCCTTTGAGAACCCCTCCCCACCT **TCTGG**

PCT/US2003/028547

2052/6881 FIGURE 1887

MATTAAPAGGARNGAGPEWGGFEENIQGGGSAVIDMENMDDTSGSSFEDMGELHQRLREEEVDADAADAAAAEEE DGEFLGMKGFKGQLSRQVADQMWQAGKRQASRAFSLYANIDILRPYFDVEPAQVRSRLLESMIPIKVVNFPQKIA GELYGPLMLVFTLVAILLHGMKTSDTIIREGTLMGTAIGTCFGYWLGVSSFIYFLAYLCNAQITMLQMLALLGYG LFGHCIVLFITYNIHLHALFYLFWLLVGGLSTLRMVAVLVSRTVGPTQRLLCGTLAALHMLFLLYLHFAYHKVV EGILDTLEGPNIPPIQRVPRDIPAMLPAARLPTTVLNATAKAVAVTLQSH

PCT/US2003/028547

FIGURE 1888

GCGGAAGCGGCCCATTCGTCTTCCGAGCGCTACTGCCAGCTGATGCCGGGAGCTAACTACCGCGCCGGGGCCGG GGCCGGGGCCCGACGTCCCCGCGGGGCCCGGGACCGCGAGGACGGCGGGGGCCTGGAGCCCGCGGC CGTGGCCCGCGACCTATTGAGGGGCACATCTAACATGTCATTTGAGGAGCTGTTGGAATTGCAGAGCCAAGTGGG GACTAAGACGTACAAACAATTGGTAGCTGGAAATAGTCCTAAGAAACAAGCTTCTAGACCACCTATCCAAAATGC ATGTGTTGCAGATAAGCACAGGCCTCTGGAAATGTCAGCCAAGATCCGAGTACCATTTTTACGTCAGGTTGTTCC CATTAGTAAAAAGGTAGCCCGGGACCCTCGCTTTGATGATCTGTCAGGGGAATATAATCCTGAGGTGTTTGACAA AACATACCAATTCTTGAATGACATCCGAGCGAAAGAGAAAGAGTTGAAGAAGCACCTTTCAGGAGAGGAGCATGA GAAACTGCAGCAACTGCTTCAGCGAATGGAGCAGCAAGAAATGGCACAGCAGGAACGAAAGCAACAGCAGGAGCT GCACCTGGCCCTGAAGCAAGAACGTCGGGCTCAGGCCCAGCAGGGCCATCGGCCATACTTCCTGAAAAAATCTGA GCAGCGCCAGTTGGCACTAGCTGAGAAGTTCAAGGAGCTGAAACGCAGCAAGAAATTGGAGAACTTCTTGAGTCG AAAGAGGCGACGAAATGCAGGCAAGGACAGGAGACATCTCCCTTTGAGCAAAGAGTAATAAGGAACTATCCTCTG CTCTGCCACTGCCCCAGGGAGACATGGATCTGTGAGGACAGATTTGGCCACGGCTGGTTTCCGTTCAAGGGCAAG GATCACAGCTGCCCTTGAATCTCATTGCCTCAGAGAAGACTAGAGGGCTCTTGGACTATCCCTAGGGCTACACAA GAATAGTTCAGCCTTCTGCCATGCCACACCCTCAGCTTGAATCTGGTTCATTGCGTCCTCGTGTTCTTCTCTC ATCCTTGCCTTAAACCAGGGATTCTGATACCGAAGAAGAGGGGCCCAATGAAAACCATGGAGTCTGTTCGTGACTC CCAGGGCTGGGACATTATGTAGGAGCCACTTCATAAACATTCTCTTTACTCATCTTTTATTCTGTTTTTTTGTGG CCTTCTTTTTGTGTTTCCCCCCGAAACAGAGTCTCGCTCTGTCACCCAGGCTAGAGTACAGTGGTGCAATCTCG CCTCACTGCAACCTCCACCTCCCAGGTTCAAGTGATTCTTGTGCCTCAGCCTCCCGAGTAGCTGACATCCGCCAC CAAGCCCAGCTAATT

PCT/US2003/028547

2054/6881 FIGURE 1889

MPGANYRAGAGAGARRPRGARDREEDGGGLEPAAVARDLLRGTSNMSFEELLELQSQVGTKTYKQLVAGNSPK KQASRPPIQNACVADKHRPLEMSAKIRVPFLRQVVPISKKVARDPRFDDLSGEYNPEVFDKTYQFLNDIRAKEKE LKKHLSGEEHEKLQQLLQRMEQQEMAQQERKQQQELHLALKQERRAQAQQGHRPYFLKKSEQRQLALAEKFKELK RSKKLENFLSRKRRNAGKDRRHLPLSKE WO 2004/030615 PCT/US2003/028547

2055/6881 FIGURE 1890

AGGACCCGCGCCCCGGCTCGGCCTGGCAGATAGCAGAGGCAGCAGCCGTGCCGGGGGGGCATGTTGCT AGTGGCTGTCGGGCATCGGGTATACTCCTTCGGGGGTTACTGCTCTGGTGAAGACTATGAGACACTGCGTCAGAT AGATGTGCACATTTTCAATGCAGTGTCCTTGCGTTGGACAAAGCTGCCCCCGGTGAAGTCTGCCATCCGTGGGCA AGCTCCTGTGGTACCCTACATGCGCTATGGACACTCAACCGTCCTCATCGACGACACACTCCTCTTTGGGGCGG GCGGAATGACACCGAAGGGGCCTGCAATGTGCTCTATGCCTTTGACGTCAATACGCACAAGTGGTTCACACCCCG AGTGTCAGGGACAGTTCCTGGGGCCCGGGATGGACATTCAGCCTGTGTCCTAGGCAAGATCATGTACATTTTTGG GGGCTACGAGCAGCAGGCGGACTGTTTTTCCAATGACATTCACAAGCTAGATACCAGCACCATGACATGGACTCT TGACACCAGAACTGAGGCTTGGCTGGACTGTCCCCCGACTCCAGTGCTGCCTGAGGGGCCGCCGGAGCCACTCGGC CTTTGGCTACAATGGGGAGCTGTACATCTTTGGTGGTTATAATGCAAGGCTGAACCGGCACTTCCATGACCTCTG GAAGTTTAATCCTGTGTCCTTTACCTGGAAAAAGATTGAACCGAAGGGGGAAGGGGCCATGTCCCCGCCGCCCCA GTGCTGCTGTATTGTTGGTGACAAGATTGTCCTCTTTGGGGGGTACCAGTCCATCTCCTGAGGAAGGCCTGGGAGA TGAATTTGACCTTATAGATCATTCTGACTTACACATTTTGGACTTTAGCCCTAGTCTGAAGACTCTGTGCAAACT GGCCGTGATTCAGTATAACCTAGACCAGTCCTGTTTGCCTCATGATATCAGGTGGGAGCTGAATGCCATGACCAC ${\tt CAACAGCAATATCAGTCGCCCCATCGTCTCCCCATGGG} \underline{{\tt TAG}} {\tt CAGGAAGTTTCTGCCACCTCCCTGAGCC}$ TGCTGTCATCTTCACTGCCCTGCCCATCTGTCACCCACCTGCTCCTTTGACCCCTGGACTTGGTATACCTCCAT GTGGAGTTGTTGGGCGAGAGGTGTTCTCTGTGCTGTGAATTCAGTGGGGAGCTGTAGCGGGGTGGGGGCTAGGTT CCTCCCCCTTGGGCCGAGGGCCCCTTCCCCTTGGTGCTCTGTCCCCATCCACCTCCTTTCAGCTGCTCCTGGGC CTGAGCCTCAGGAGCTTCCCCCTCTCCCCTTTGCCTATCCCCTCTCCCTTTGAGCCTTGACCTGGGA GCTGAAAGGAGTTGCAGCTGTTGGCATGAGACCTCCTTCTCCCCGTCTTGGGGAGGTGGGGACCAGCAGATAAAT CAAA

PCT/US2003/028547

2056/6881 FIGURE 1891

MLRWTVHLEGGPRRVNHAAVAVGHRVYSFGGYCSGEDYETLRQIDVHIFNAVSLRWTKLPPVKSAIRGQAPVVPY
MRYGHSTVLIDDTVLLWGGRNDTEGACNVLYAFDVNTHKWFTPRVSGTVPGARDGHSACVLGKIMYIFGGYEQQA
DCFSNDIHKLDTSTMTWTLICTKGSPARWRDFHSATMLGSHMYVFGGRADRFGPFHSNNEIYCNRIRVFDTRTEA
WLDCPPTPVLPEGRRSHSAFGYNGELYIFGGYNARLNRHFHDLWKFNPVSFTWKKIEPKGKGPCPRRQCCCIVG
DKIVLFGGTSPSPEEGLGDEFDLIDHSDLHILDFSPSLKTLCKLAVIQYNLDQSCLPHDIRWELNAMTTNSNISR
PIVSSHG

PCT/US2003/028547

2057/6881 FIGURE 1892

CCTTCAATGTGAAGCTAATATCTCCTATAGCATAGTTAATGTTTATTCAACAAATATTCATGCAGCGGAGTCAAG ${\tt GGGCCGCAGGAGACGGGCCGGACGGGCCGAG}$ GGTTGCCAAATGCACAGCCAAGCCTAGCAGCTCGGGCAAGGATGGTGGAGGCGAGAACACTGAGGAGGCCCAGCC GCAGCCCCAGCCCCAGCCCCAAGCCCAGTCTCAGCCACCGTCATCCAACAAGCGTCCCAGCAATAGCAC GCCGCCCCCACGCAGCTCAGCAAAATCAAGTACTCAGGGGGGCCCCCAGATTGTCAAGAAGGAGCGACGGCAAAG CTCCTCCCGCTTCAACCTCAGCAAGAATCGGGAGCTGCAGAAGCTTCCTGCCCTGAAAGATTCGCCAACCCAGGA GCGGGAGGAGCTGTTTATCCAGAAGCTACGCCAGTGCTGTCTCTTTTGACTTCGTGTCAGACCCACTCAGTGA CCTCAAATTCAAGGAGGTGAAGCGGGCAGGACTCAACGAGATGGTGGAGTACATCACCCATAGCCGTGATGTTGT CACTGAGGCCATTTACCCTGAGGCTGTCACCATGTTTTCAGTGAACCTCTTCCGGACGCTGCCACCTTCATCGAA TCCCACAGGGGCTGAGTTTGACCCAGAGGAAGATGAGCCCACCCTGGAAGCTGCTTGGCCACATCTCCAGCTCGT GTATGAGTTCTTCTTACGTTTCCTTGAGTCTCCTGATTTCCAGCCAAACATAGCCAAGAAGTACATCGACCAGAA GTTTGTACTTGCTCCTAGACCTATTTGACAGTGAGGATCCTCGAGAGCGGGACTTCCTCAAGACCATTTTGCA TCGCATCTATGGCAAGTTTTTGGGGCTCCGGGCTTATATCCGTAGGCAGATCAACCACATCTTCTACAGGTTCAT CTACGAGACGGAGCATCACAACGGGATTGCTGAGCTCCTGGAGATCCTGGGCAGCATCATCAATGGCTTTGCTCT GCCCCTTAAAGAAGAGCACAAGATGTTCCTCATCCGTGTCCTACTTCCCCTTCACAAGGTCAAGTCCCTGAGTGT GGGACTTCTCAAGTTTTGGCCCAAGACCCACAGCCCCAAGGAGGTGATGTTCTTGAATGAGCTGGAGGAGATTCT GGACGTCATTGAACCTTCTGAGTTCAGCAAAGTGATGGAACCCCTCTTCCGCCAGCTGGCCAAGTGTGTCTCTAG CCCCCATTTCCAGGTGGCAGAGCGTGCTCTCTATTACTGGAACAATGAGTACATCATGAGCCTGATAAGTGACAA TGCTGCCCGAGTCCTCCCCATCATGTTCCCTGCACTCTACAGGAACTCCAAGAGCCACTGGAACAAGACAATCCA TGGACTGATCTATAATGCCCTGAAGTTGTTTATGGAAATGAATCAGAAGCTGTTTGATGACTGCACACAACAATA CAAGGCAGAGAAGCAGAAGGGCCGGTTCCGAATGAAGGAAAGGGAAGAGATGTGGCAAAAAATCGAGGAGCTGGC CCGGCTTAATCCCCAGTATCCCATGTTCCGAGCCCCTCCACCACTGCCCCCTGTGTACTCGATGGAGACAGAGAC CCCCACAGCTGAGGACATCCAGCTTCTGAAGAGGACTGTGGAGACTGAGGCTGTTCAGATGCTAAAAGACATCAA GAAGGAGAAAGTGCTGCCGGAGGAAGTCGGAGCTGCCCCAGGACGTGTACACCATCAAGGCACTGGAGGCGCA ${\tt CAAGCGGGCGGAAGAGTTCCTAACTGCCAGCCAGGAGGCTCTC} \underline{{\tt TGA}} {\tt CCCCTCACGTTCCTACCACAGGGCCACAG}$ CCCACACAGCCCTGGGACACTGCCCTGGCCCTCCATACTCTGCTCCCTACTGGCTGTCTTGGGGGAAGGCAGCGC $\tt CTCTCTAGCTACTCAAGGGGGGGGGGGGGGGCACTTGAAGCAGGGGACACCCACAGAATGGTCCCTCTTCTCCCCC$ AAAAGGTGTTCATGCCTCCCTGTGGCTAGTACAGGCTGAGCACTAAGATGCTTAGTGCTCAGACAACCTGGGGAT GGAACAGCAGGAGATTATTCTCACCAAAGTTATGTCAAGCCCCATTGGTCCCAGAGTAGCTGAAGGGAAGCCAAC CCCCTGCAGCACAAATAGGCCCCCCAGTCCCAGCCGTGTGCTGGCAGATAGGGTTGTATTATTTCTTCTTACCC CATGCCTGACCAAGGGAGGTCAAAAGGAGAAAAGTATAGGCTGTGGACAATAACTGATGAATATAGGGCCCAGAT GGACCAAGTGGGGCCGGGGAGGGATGAATAAACACCCTACCCCGTGCCCTGTCTTTGGTGAGCAGCAGCCCTGGG GGCAGTGCGGCTTTTGGCTGTACATAGGGTGCTTTATTCTCCACAGAGTGATACATGCTAAGGTGGGTTGGGC TTGGACCGATGTCCCCATATGTACAGAACTGAATAAAGTGGGTCTCTG

PCT/US2003/028547

2058/6881 FIGURE 1893

MPYKLKKEKEPPKVAKCTAKPSSSGKDGGGENTEEAQPQPQPQPQPQPQAQSQPPSSNKRPSNSTPPPTQLSKIKYS
GGPQIVKKERRQSSSRFNLSKNRELQKLPALKDSPTQEREELFIQKLRQCCVLFDFVSDPLSDLKFKEVKRAGLN
EMVEYITHSRDVVTEAIYPEAVTMFSVNLFRTLPPSSNPTGAEFDPEEDEPTLEAAWPHLQLVYEFFLRFLESPD
FQPNIAKKYIDQKFVLALLDLFDSEDPRERDFLKTILHRIYGKFLGLRAYIRRQINHIFYRFIYETEHHNGIAEL
LEILGSIINGFALPLKEEHKMFLIRVLLPLHKVKSLSVYHPQLAYCVVQFLEKESSLTEPVIVGLLKFWPKTHSP
KEVMFLNELEEILDVIEPSEFSKVMEPLFRQLAKCVSSPHFQVAERALYYWNNEYIMSLISDNAARVLPIMFPAL
YRNSKSHWNKTIHGLIYNALKLFMEMNQKLFDDCTQQYKAEKQKGRFRMKEREEMWQKIEELARLNPQYPMFRAP
PPLPPVYSMETETPTAEDIQLLKRTVETEAVQMLKDIKKEKVLLRRKSELPQDVYTIKALEAHKRAEEFLTASQE
AL

PCT/US2003/028547

2059/6881 FIGURE 1894

PCT/US2003/028547

2060/6881 FIGURE 1895

MDSMPEPASRCLLLLPLLLLLLLLPAPELGPSQAGAEENDWVRLPSKCEVCKYVAVELKSAFEETGKTKEVIGT GYGILDQKASGVKYTKSDLRLIEVTETICKRLLIIACTRRGPAAIDLPRACQRPLRHYTTWYTKGSRW

PCT/US2003/028547

2061/6881 FIGURE 1896

TGATGAAACTGTAACTTACAAGAAAAGGGCTGGGTTTTGAAAATAACACAGGCTCTAAAAAACCCTAAGAAGCGGT GCAACTTTTGGCAGGAATCGGGGTTAGCGGGACCTCAAGGGCTCACTGCGGCTAAGTGAACGCTGACTGGTCCTC CAGCGTGAGCTAGAACAGACGTCTCTATGGTCAAGTAAACAGAGCGTGTGCTGTCTTCCCCATGTGGTGGGGTTG CGCATGATCAGTAGCTGCACCACTAGAAAGATGGCGGAGCAAGAGCAAAGAAAAATCCCTTTGGTTCCAGAAAAT CTCCTGAAAAAGAGGAAGGCTTATCAAGCCCTCAAAGCCACCCAGGCAAAGCAGGCACTTTTGGCAAAGAAGAAGAA CAGAAGAAAGGAAAAGGGCTCAGGTTTAAGCGACTGGAATCATTCCTACATGATTCCTGGCGGCAGAAACGTGAC AAGGTGCGTCTCAGACGACTAGAAGTGAAACCTCATGCCTTGGAATTGCCAGATAAACATTCCTTGGCCTTTGTT GTACGCATCGAAAGGATTGACGGCGTGAGTTTACTGGTGCAGAAACCATTGCAAGACTTCGCCTAAAGAAAATT TTTAGTGGTGTCTTTGTAAAAGTCACCCCCAGAATCTAAAAATGCTGCGTATAGTGGAACCTTATGTGACCTGG GGATTTCCAAATCTGAAGTCTGTCCGAGAACTCATTTTGAAACGTGGACAAGCCAAGGTCAAGAATAAGACCATC GAAATTGCCTTCCCAGGGAAGCATTTCCAGGAGATCTCATGGTTCTTGTGCCCTTTCCACCTCTCAGTGGCCCGT CTCATCCGTCAGCTGAACTAGACCCAGGTGCCAAACTGCGGTAAATTTTTTATCAGTGAAGTGGAAGCATGTGTT TTGTTTTGGAAATTTTTATCAAGTATCTTCAGAGAAGATTATTTCCTGCTTTATCTTCAGAAACTGGAAAGGGTC AAAGAAAAGACAGTAGCTGGCCGGTCGTGGTGGCTCATGCCTGTAATCCCAACACTTAGGGAGGCTGAGGTGGGC AGATCACCTGAGGTTGGGAGTTCGAGACCAGCCTGACCAACATGGAGAAATGCCATCTCTACTAAAAATACAAAA ATTAGCCGGGCATGGTGCCCTGTAATCCCAGCTACTCAGGAGGCTGAGGCAGGAGAATCGCTTGAACCT GGGAGGTGGAAGTTGCAGTGAGCTGAGATCACGCCATTGCACTCCAGCCTGGGCAACAAGCGAAACTCTGTCTCA AAAAAAAAGAAAAGACAGTAGCATATGTTCATGTCAAGCACCTCTCATCACGAGTTCCAAGGAAAAATTCC TGTATCCTAGGGTTTAATGTTGGTAAATGAGTCACTCTAGCATTTGTAGAAGGCTCCCTGAGACTCCTGCAGCAG TCGACCAAGCCCAAGGACATAATTGAATCTGGAGAGTCCTGGGGCCTTGTTTTGAAAAAGACTTGAAATACACAT AGGAAGAAAGGCATAAAAATAAATGTTCACTTGTCTCTGC

PCT/US2003/028547

FIGURE 1897

MISSCTTRKMAEQEQRKIPLVPENLLKKRKAYQALKATQAKQALLAKKEQKKGKGLRFKRLESFLHDSWRQKRDK VRLRRLEVKPHALELPDKHSLAFVVRIERIDGVSLLVQRTIARLRLKKIFSGVFVKVTPQNLKMLRIVEPYVTWG FPNLKSVRELILKRGQAKVKNKTIPLTDNTVIEEHLGKFGVICLEDLIHEIAFPGKHFQEISWFLCPFHLSVARH ATKNRVGFLKEMGTPGYRGERINQLIRQLN

PCT/US2003/028547

2063/6881 FIGURE 1898

CGCCAGACCCGCGCCCCGCGCTCCCCGCCCTGCCTTGGGACTCGCGAGCCCGCACTCCCGCCCTGCCT CTGCTGGGGGACCAGCGTGTCCTGCAGAGCCTGCTCCGCCTGGAGGAGCGCTACGTACCCCGCGCCTCCTACTTC CAGTGCGTGCAGCGGAGATCAAGCCGCACATGCGGAAGATGCTGGCTTACTGGATGCTGGAGGTATGTGAGGAG CAGCGCTGTGAGGAGGAAGTCTTCCCCCTGGCCATGAACTACCTGGATCGCTACCTGTCTTGCGTCCCCACCCGA AAGGCGCAGTTGCAGCTCCTGGGTGCGGTCTGCATGCTGCCTCCAAGCTGCGCGAGACCACGCCCCTGACC ATCGAAAAACTGTGCATCTACACCGACCACGCTGTCTCTCCCCGCCAGTTGCGGGACTGGGAGGTGCTGGTCCTA CCCCGTGACCGACAGGCCTTGGTCAAAAAGCATGCCCAGACCTTTTTGGCCCTCTGTGCTACAGATTATACCTTT GCCATGTACCCGCCATCCATGATCGCCACGGGCAGCATTGGGGCTGCAGTGCAAGGCCTGGGTGCCTGCTCCATG CAGATCGAAGCTGCACTCAGGGAGGGCCTCAGGGAAGCCTCTCAGACCAGCTCCAGCCCCAGAGCCCCAAAGCCCCC ${\tt CGGGGCTCCAGCCAAGGGCCCAGCCAGACCAGCACTCCTACAGATGTCACAGCCATACACCTG} {\color{red}{\bf TAG}{\tt CCCTGG}}$ ACATCTAAGCCTGAAGGGGCGTCTGTTCCCCCTTCACAAAGCCCAAGGGATCTGGTCCTACCCATCCCGCAGTG TGCACTAAGGGGCCCGGCCAGCCATGTCTGCATTTCGGTGGCTAGTCAAGCTCCTCCTCCCTGCATCTGACCAGC TTGAACGCCCCCCCCCCCCCTGGGGGCTCTCATGTTTTCAACTGCCAAAATGCTCTAGTGCCTTCTAAAGGTGT TGTCCCTTCTAGGGTTATTGCATTTGGATTGGGGTCCCTCTAAAATTTAATGCATGATAGACACATATGAGGGGG AATAGTCTAGATGGCTCCTCTCAGTACTTTGGAGGCCCCTATGTAGTCCGTGCTGACAGCTGCTCCTAGAGGGAG GGGCCTAGGCCTCAGCCAGAGAAGCTATAAATTCCTCTTTGCTTTGCTTTCTGCTCAGCTTCTCCTGTGTGATTG ACAGCTTTGCTGCTGAAGGCTCATTTTAATTTATTAATTGCTTTGAGCACAACTTTAAGAGGACATAATGGGGGC $\tt CTGGCCATCCCACAAGTGGTGGTAACCCTGGTGGTTGCTGTTTTCCTCCCTTCTGCTACTGGCAAAAGGATCTTT$ GTGGCCAAGGAGCTGCTATAGCCTGGGGTGGGGTCATGCCCTCTCCCCATTGTCCCTCTGCCCCATCCTCCAG CAGGGAAAATGCAGCAGGGATGCCCTGGAGGTGGCTGAGCCCCTGTCTAGAGAGGGGAGGCAAGCCCTGTTGACAC AGGTCTTTCCTAAGGCTGCAAGGTTTAGGCTGGTGGCCCAGGACCATCATCCTACTGTAATAAAGATGATTGTGA

PCT/US2003/028547

2064/6881 FIGURE 1899

MELLCCEGTRHAPRAGPDPRLLGDQRVLQSLLRLEERYVPRASYFQCVQREIKPHMRKMLAYWMLEVCEEQRCEE EVFPLAMNYLDRYLSCVPTRKAQLQLLGAVCMLLASKLRETTPLTIEKLCIYTDHAVSPRQLRDWEVLVLGKLKW DLAAVIAHDFLAFILHRLSLPRDRQALVKKHAQTFLALCATDYTFAMYPPSMIATGSIGAAVQGLGACSMSGDEL TELLAGITGTEVDCLRACQEQIEAALRESLREASQTSSSPAPKAPRGSSSQGPSQTSTPTDVTAIHL

PCT/US2003/028547

2065/6881 FIGURE 1900

CACCGCGCAAGCGCATCCTGGCCTTTCTTCAGTCCCCACGTGCGATCCTTCCCGGCAACTTTTTCGAGAAAAATG AATGCGGTGCGGGGGGTCCGGGAGAAGCGGCGGGGTCGCGGGACAGGAGAAGCGGAGGAAGAGTATGTGGGG CCCCGGCTGAGCCGACGGATTTTGCAGCAAGCACGGCAGCAACAGGAGGAACTCGAGGCCGAGCATGGGACTGGG GACGAGGAGTGGCCCACCCTGGAGAAGGCTGCCACAATGACAGCAGCGGGCCATCATGCAGAGGTGGTTGTGGAC CCTGAGGATGAGCGTGCCATAGAGATGTTC<u>ATG</u>AACAAGAACCCTCCTGCCAGGCGCACCCTGGCTGACATCATC ATGGAGAAGCTGACTGAGAAGCAGACAGAGGTTGAGACAGTCATGTCAGAGGTGTCGGGCTTCCCTATGCCCCAG CTGGACCCCGGGTCCTAGAAGTGTACAGGGGGGTCCGGGAGGTATTATCTAAGTACCGCAGTGGAAAACTGCCC AAGGCATTTAAGATCATCCCTGCACTCTCCAACTGGGAGCAAATCCTCTACGTCACAGAGCCGGAGGCCTGGACT GCAGCTGCCATGTACCAGGCCACCAGGATTTTTGCCTCTAACCTGAAGGAACGCATGGCCCAGCGCTTCTACAAC CTTGTCCTGCTCCCTCGAGTACGAGATGACGTTGCTGAATACAAACGACTCAACTTCCATCTCTACATGGCTCTC AAGAAGGCCCTTTTCAAACCTGGAGCCTGGTTCAAAGGGATCCTGATTCCACTGTGCGAGTCTGGCACTTGTACC CTCCGGGAAGCCATCATTGTGGGTAGCATCATCACCAAGTGCTCCATCCCTGTGTTGCACTCCAGTGCGGCCATG CTGAAAATTGCTGAGATGGAATACAGCGGTGCCAACAGCATCTTCCTGCGACTGCTGCTGGATAAGAAGTATGCA CTGCCTTACCGGGTGCTGGATGCCCTAGTCTTCCACTTCCTGGGGTTCCGGACAGAGAAGCGTGAACTGCCTGTG CTGTGGCACCAGTGCCTCCTGACTTTGGTCCAGCGCTACAAGGCCGACTTGGCCACAGACCAGAAAGAGGCCCTC TTAGAACTGCTCCGGCTGCAGCCCCATCCACAGCTATCGCCCGAAATCAGGCGTGAGCTTCAGAGTGCAGTCCCC $\tt CGCGATGTGGAAGATGTTCCCATCACCGTGGAG\underline{TGA} GGAAAACAGTCAGCTGTCCTGGCCAAAGGGGTTTGGAAG$ GACACCAAGACCCCCGTTGGTGACTGAAGATGACACTGAGCTTTAATGGCTGAAGACCCAGATCAGGGCAGTGAC TAGGCCCTTATCCCTGTTTAGTTCTGAGAGCCAACTTGAGATACCATATGCTAGCATTCCCAGTCCCCAGCTGGG ΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑ

PCT/US2003/028547

2066/6881 FIGURE 1901

MNKNPPARRTLADIIMEKLTEKQTEVETVMSEVSGFPMPQLDPRVLEVYRGVREVLSKYRSGKLPKAFKIIPALS NWEQILYVTEPEAWTAAAMYQATRIFASNLKERMAQRFYNLVLLPRVRDDVAEYKRLNFHLYMALKKALFKPGAW FKGILIPLCESGTCTLREAIIVGSIITKCSIPVLHSSAAMLKIAEMEYSGANSIFLRLLLDKKYALPYRVLDALV FHFLGFRTEKRELPVLWHQCLLTLVQRYKADLATDQKEALLELLRLQPHPQLSPEIRRELQSAVPRDVEDVPITV E WO 2004/030615 PCT/US2003/028547

FIGURE 1902

CTTGGGGTGGGGACCGGGTGAGGGGCCTGACGGCAGAGTCGGTCCAGAACTGCCCGGACAGCGACAGCGAG GAGCCAAAATGGAAGAGGGTGCAAGTCCCCTCCTGGGGCCCCAGACGCCCCCTCCTTTCTTGCTGCCTGGAGCAG GGGCAGTGCTGTTAGTGGCTACTCCTGGTGTGAACAGCCCATCCTGGCCACCTTCCACAGGAAACCTGACCTGAA CCCCAAGCCCCAGGATCCAGGTCCACCCAGCCAACTCAGACAGTGACTCAGGCCACCTGCCGGGGGAGGACCCTGA GGATACCCATGCTCAGGAATTCCTGTCTCTGCACCTGCTTAGAACATGGGGTTTTGACTTTAAACTCATTCACAT GAGTATTCATTATCTCCCTAGGGGGTCTGTATTGTCAAACCAGACTCTAGGGGCCTTTGGCCCCAAGGCGTGAAG GGGGTTAAGAAGGGAAAGCATAAGAAGGGAAGCTGTTTTGGGGTGTGGGGCCTCCCCAGCCTCCAAGGAAGA CCACACATGCAGGCATCAGTCAGCTATCCTTGCACTCAGTGAGGATCTGCAAGGAGGACCCTCCCAAATGGAGGG $\texttt{CCTAGTTTCACTCCCCCTTCTTCC} \underline{\textbf{ATG}} \\ \texttt{TCTCCTCAGGGTCCTGCAGTTCTGAGCTTGGGTTCCCTTTGCCTGG} \\$ GCTACTGCCTGGCCCTTGGGGAGGAGGAGCGGCCGAGCTGCAGCTCTTCTGTGCCAGGCGGAAGCAGGAAGCCC TGGGACAGGGGGTAGCCCGCCTGGTACTTCCCAAGCTTGAAGGACACACCTGTGAGAAGTGTAGGGAGTTGCTGA ${\tt AGGCCTGTGGCCAGGCCCTGATAAACCTCATCTACTTCTACCATGATGGACAACTCTACTGCGGCCGTCATCATG}$ CAGAGTTGCTGCGCCCGCCTGCCCGGCTTGTGACCAGCTGATCTTCTCCTGGCGCTGCACCGAGGCGGAGGGAC GGGGAAGCCCCTGCTGCCCAGCTGCTTCGAGAACCGCTACTCGGATGCAGGCTCGAGCTGGGCCGGGGCACTGG AAGGGCAGGCATTCCTTGGAGCGCCCCACCGCACCCCCAGACCCAAGCCTCGGGGCCCGCAGCTCTCACCGCG CTCCCAGGCGCGGAGGCGGACGCCCTCTGGTGGAGGCGGGGGACCCTGGCGAGGACTCTCGGCGGCGGCGGCGG CAAACCTCGGTGAACTCTGCAACCCTCTCCCGAACACTCCTTGCTGCCGGCGGTTCCAGCCTGCAAACTCAG AGGGGGCTGCCTGGATCCAGTCCCCAGCAGGAGAACCGACCTGGGGACAAAGCGGAGGCACCCAAAGGGCAGGAG CAATGCCGCCTGGAGACTATTCGTGATCCCAAGGACACCCCTTTCTCCACCTGCTCCTCCTCTGACTCGGAA CCTGAAGGATTTTTCTTAGGCGAGCGCCTTCCCCAGTCCTGGAAGACCCCCGGAAGCCTCCAAGCAGAGGACAGC AACGCCTCTAAGACGCACTGCACCATGTGCTAGTGGCGCAGCTCAGAGAGGGGATGTGAGTGGGAGGAAAGGGGT CTGTAAAGCGGGAGAACAAGGCTAGCCTCCCCCTAACAATCCTAGACTGAGACGCAGTCAGGCGCACGCCCGCAA GAGGCGGCGAGGTGACAAGTTTGGAGTGCGCCCCCTTCAGTACTGCGCGTTCTAAGACTTTTGGCGGAGACTTTC TTGGCAAAACCCATTCCCCAAAGCTACGCTTCCCCTGCTGAGATAGCCCCTACCCCCACCTCCACAGGCTGGGAC AGCCCCGTCCCCACCATCCTCCCCAAGCCAATTAAATGATCACAGCACGCGTGACAGTTACCGGCTGGAGAGC CGGAGGTGGGACCGGGAGCAGGGGACCGTAGAACCGGGCCGCGCTCCTCCCTAGAGTTCGTGGAGGCGCAG GCCAGACCGGAGGTGCGTCATTCACCGGCGACGCCGATACGGTTCCTCCAGCGAGGCCCATGCGAAGCTTTCCAC TATGGCTTCCAGCACTGTCCCGGTGAGCGCTGCTGGCTCGGCTAATGAAACTCCCGAAATACCGGACAACGTGGG AGATTGGCTTCGGGGCGTCTACCGCTTTGCCACTGATAGGAATGACTTCCGGAGGAACTTGATACTAAATTTGGG ACTCTTTGCTGCGGGAGTTTGGCTGGCCAGGAACTTGAGTGACATTGACCTCATGGCACCTCAGCCAGGGGTGTA GCCAAGTAGTTCTAATGCCACCTGTCGTCTTATCATCTGATTGCAGACAAATGGAATCCTGTGCTGAACCCGAAT CTTCCAAAAAACAGCCTACAATCTGTGACCACCACAAGATGTGCCCTGATGGCAGCTGAAGTTTGATTCAGATGG GCACTTTTCTTCCCCTTCCCTGCCTAGTTTCCTTTTGTTCCTTGAGTCCACGCAGAATTCCATTCTCTGGTCAGC AGACAGGCTTAAGCTAAAGTATTGCCTCTATTCTGTAAAGTTCTGTACATAGTTCCCAAGCTTCTGCAGGGGGTG AAAAAAAAAAAAAAA

PCT/US2003/028547

2068/6881 FIGURE 1903

MSPQGPAVLSLGSLCLDTNQAPNWTGLQTLLQQLPPQDIDERYCLALGEEERAELQLFCARRKQEALGQGVARLV LPKLEGHTCEKCRELLKPGEYGVFAARAGEQRCWHQPCFACQACGQALINLIYFYHDGQLYCGRHHAELLRPRCP ACDQLIFSWRCTEAEGQRWHENHFCCQDCAGPLGGGRYALPGGSPCCPSCFENRYSDAGSSWAGALEGQAFLGAP PPHPPDPSLGARSSHRASLAGAFQGPPEPTPRRGRGCGARLPPRRGRRTPSGGGGGPWRGLSAAAAARTAQGLGG AGGWASPPLAAV

PCT/US2003/028547

2069/6881 FIGURE 1904

CTAGTTAAGGCGGCACAGGGCCGAGGCGTAGTGTGGGTGACTCCTCCGTTCCTTGGGTCCCGTCGTCTGATAC TGCAGTTCAGCCATGCAGAACCGCAGCCCCCGTCCGGCGCCCTCACGGACGAGGCCGCCCTCAGTTGCTGCTCC GACGCGGACCCCAGTACCAAGGATTTTCTATTGCAGCAGACCATGCTACGAGTGAAGGATCCTAAGAAGTCACTG GATTTTTATACTAGAGTTCTTGGAATGACGCTAATCCAAAAATGTGATTTTCCCATTATGAAGTTTTCACTCTAC TTCTTGGCTTATGAGGATAAAAATGACATCCCTAAAGAAAAAGATGAAAAAATAGCCTGGGCGCTCTCCAGAAAA GCTACACTTGAGCTGACACAATTGGGGCACTGAAGATGATGCGACCCAGAGTTACCACAATGGCAATTCAGAC CCTCGAGGATTCGGTCATATTGGAATTGCTGTTCCTGATGTATACAGTGCTTGTAAAAGGTTTGAAGAACTGGGA GTCAAATTTGTGAAGAAACCTGATGATGGTAAAATGAAAGGCCTGGCATTTATTCAAGATCCTGATGGCTACTGG ATTGAAATTTTGAATCCTAACAAAATGGCAACCTTAATG<u>TAG</u>TGCTGTGAGAATTCTCCTTTGAGATTTCAGAAG AAAGGAAACAATGTGATTCAAGATATTTACATACCAGAAGCATCTAGGACTGATGGATCACTGTCCCGATTCAAA TTATTCTTCAGTCCATTTCCCCTTCCTATTTCAGCTGTTCCTTTTCACCTAACTGTTCAGTCATTCTGGTTTTCA AGCAGTGCTTTATCTCATGTCCTTGAATATAGTTGTGTAACTTTATTTTTTAGGTAATAATTAGAACAGTTCCCT TCAGAGGCTGCATTTGCCTTCTTCTGCCACCTAAATATTACTTCCCTTCAAATCTGCCTTTGAATCATCATTTTT AAAAAAAATTAACATGTTTTTGTTGTAGTTATCTTCTGGGGTTTCAATTCCTCAGAAACAACTTTTTTCACAAC GGAAAGGAAAGAACACTAGTGTTCTTTCAGTAAAGTACAAAGTGTTTATTTTACAAAAGAGTAGGTACTCTTGAG AGCAATTCAAATCATGCTGACAAGGATACTGATAGAAAAAGTGATTTCTTCTTATTATAAAGTACATTTAAAAGTT TGGATTATTAATGGATTTAAGAGGGCATCAATCAGCTCAACTCAAGATTTCATAATCATTTTTAGTATTTAGATT GTGCCTCAAAGTTGTAGTACCTCACAATACCTCCACTGGTTTCCTGTTGTAAAAACCTTCAGTGAGTTTGACCAT TGTGCTCTTGGCTCTTGGGCTGGAGTACCGTGGTGAGGGGAGTAAACACTAGAAGTCTTTAGTACAAAACTGCTCT AGGGACACCTGGTGATTCCTACACAAGTGATGTTTATATTTCTCATAAAGAGTCTTCCCTATCCCAAGGTCTTCA TGATGCCAGTAGCCATATATGATAAATTATGTTCAGTGATAACTTAGTTATCAGAAATCAGCTCAGTGGTCTTCC CCGCCATGATTCACATTTGATGAGTTTTTAAAAATCAAAGTGATTTTGAAAATCTCTAATGGCTCAGAAAATAAA AACATCCAGTTTGTGGATGACTATATTTAGATTTCTCTAGACTCTAGTGGAAGACCTTTGGAAAGGCCATGCCAA CCGTGCTTGTACTGCTAGAAGCACTTTATGTTTCCTTTTTGGGTGAAATGGATTTATGTGAGTGCTTTAAACAAA TAGCAATACTTATAGACTGAAATAAAATGAAACTTCAAATAAG

PCT/US2003/028547

2070/6881 FIGURE 1905

MAEPQPPSGGLTDEAALSCCSDADPSTKDFLLQQTMLRVKDPKKSLDFYTRVLGMTLIQKCDFPIMKFSLYFLAY EDKNDIPKEKDEKIAWALSRKATLELTHNWGTEDDATQSYHNGNSDPRGFGHIGIAVPDVYSACKRFEELGVKFV KKPDDGKMKGLAFIQDPDGYWIEILNPNKMATLM

PCT/US2003/028547

2071/6881 FIGURE 1906

ATGGGAGCTTCGGACCCGGAGTGCCGCCCTGGGCTCGCGGCGGTGCCGCGGGGATGGCGGAGCCGGAGCTGGA GACAACGCCCGACCACTGAGGCTCTTTTCGTGGCACTGGGCGCGGGGCGTGACGGCGCTCAGCCATCCCCTGCTC GTCCTCTATCTGCCGAGCTTCTTCACCTACGCCAAGTACATCGTGCAAGTGGATGGTAAGATAGGGCTGTTCCGA GGCCTGAGTCCCCGGCTGATGTCCAACGCCCTCTCTACTGTGACTCGGGGTAGCATGAAGAAGGTTTTCCCTCCA GATGAGATTGAGCAGGTTTCCAACAAGGATGATATGAAGACTTCCCTGAAGAAAGTTGTGAAGGAGACCTCCTAC GAGATGATGATGCAGTGTGTCCCGCATGTTGGCCCACCCCCTGCATGTCATCTCAATGCGCTGCATGGTCCAG TTTGTGGGACGGGAGGCCAAGTACAGTGGTGTGCTGAGCTCCATTGGGAAGATTTTCAAAGAGGAAGGCTGCTG GGATTCTTCGTTGGATTAATCCCTCACCTCCTGGGCGATGTGGTTTTCTTGTGGGGCTGTAACCTGCTGGCCCAC TTCATCAATGCCTACCTGGTGGATGACAGCTTCAGCCAGGCCCTGGCCATCCGGAGCTATACCAAGTTCGTGATG GGGATTGCAGTGAGCATGCTGACCTACCCCTTCCTGCTAGTTGGCGACCTCATGGCTGTGAACAACTGCGGGCTG CAAGCTGGGCTCCCCCTTACTCCCCAGTGTTCAAATCCTGGATTCACTGCTGGAAGTACCTGAGTGTGCAGGGC CAGCTCTTCCGAGGCTCCAGCCTGCTTTTCCGCCGGGTGTCATCAGGATCATGCTTTGCCCTGGAG<u>TAA</u>CCTGAA TCATCTAAAAAACACGGTCTCAACCTGGCCACCGTGGGTGAGGCCTGACCACCTTGGGACACCTGCAAGACGACT GTGGGGTTGAGCGGGGTGGGGCTGCACCCAGTGGATTGGGTCACCCGGCAGACCTAGGGAAGGTGAGGCGAGGT GGGGGCCCAGGTTGGATGGGGAAAGGCTAATGGGGTCAGACCCCACCCCGTCTACCCCTCCAGTCAGCCCAGCGC ${\tt CCATCCTGCAGCTCAGCTGGGAGCATCATTCTCCTGCTTTGTACATAGGGTGTGGTCCCCTGGCACGTGGCCACCC}$ ATCATGTCTAGGCCTATGCTAGGAGGCAAATGGCCCAGCTCTGCCTGTGTTTTTCTCAACACTACTTTTCTGATA TGAGGGCAGCACCTGCCTCTGAATGGGAAATCATGCAACTACTCAGAATGTGTCCTCCTCATCTAATGCTCATCT GTTTAATGGTGATGCCTCGCGTACAGGATCTGGTTACCTGTGCAGTTGTGAATACCCAGAGGTTGGGCAGATCAG TTTGGAAAAAAAAA

PCT/US2003/028547

2072/6881 FIGURE 1907

MGASDPEVAPWARGGAAGMAGAGAGAGAGAGAGACVEARARDPPPAHRAHPRHPRPAAQPSARRMDGGSGGLGSG
DNAPTTEALFVALGAGVTALSHPLLYVKLLIQVGHEPMPPTLGTNVLGRKVLYLPSFFTYAKYIVQVDGKIGLFR
GLSPRLMSNALSTVTRGSMKKVFPPDEIEQVSNKDDMKTSLKKVVKETSYEMMMQCVSRMLAHPLHVISMRCMVQ
FVGREAKYSGVLSSIGKIFKEEGLLGFFVGLIPHLLGDVVFLWGCNLLAHFINAYLVDDSFSQALAIRSYTKFVM
GIAVSMLTYPFLLVGDLMAVNNCGLQAGLPPYSPVFKSWIHCWKYLSVQGQLFRGSSLLFRRVSSGSCFALE

PCT/US2003/028547

2073/6881 FIGURE 1908

TGTTCTTGAGCCCAGCTTCTTCTCGTCTCCCACCCCAGCTTCCCGGCATTGGAAGAAGGGACCGTCCTCTTCCTT GTCTTGGCCACCCAAATCCTGGTATCGAAAGGGTTGAACGGACCGGAAGTGTGCAGCAGCGACGGGTCCCCAGCT AATCGACGCCGGAAGTAGCAATTACTAGACAAGCATTCCGCCGCCGGCTTCGCTATGGCGGCAATTCCCCCAGAT TCCTGGCAGCCACCCAACGTTTACTTGGAGACCAGCATGGGAATCATTGTGCTGGAGCTGTACTGGAAGCATGCT CCAAAGACCTGTAAGAACTTTGCTGAGTTGGCTCGTCGAGGTTACTACAATGGCACAAAATTCCACAGAATTATC GAAGATGAACTTCATCCAGACTTGAAATTCACGGGGGCTGGAATTCTCGCAATGGCCAATGCGGGGCCAGATACC ANTIGCAGCCAGTTCTTTTGTGACCCTCGCCCCACCCAGTGGCTTGACGGCAAACACCACTTTTTGGCCGAGTG AAGATCATTAAGGCATACCCTTCTGGGTAGACTTGCTACCCTCT<u>TGA</u>GCAGCTCTTCTGAGATGGCCCCAGTGAA CCAGCTTCTAGATGACATAGAATGACATGTAATGCTAAATTTCATTTTGGCTTTGCAAGTCATGAAGCTTAGGAG GCCTGGCATCTTGGGTGAGTTAGAGATGGAAGTACATTTTAATAGGATGCTTCTTTTCTCTTCCCCCAGTGCCTA CTTCTTGTGCATGTCTGCTCTGATATACGTCGAACAATGTAGCAGCCACTGTCATTTCTCAGTGGTTTTGCCTAA CCAAACTTCTTCCTAAGGAGATTTATATTCTGGCCTACACAGCAGTCCTTGATGGCTGACAGCCACAGAATTCCA AACCAAGTAGTGTCTGTCAGCCCTCTTAACTCTGTGCACGCCCTATTTCAGTCTTTTACATTTGTTCTTCTAGGG AATGTATGCATCTCTATATATTTTTCCCTCTCAAAACCAGAACATCAACAGTGCTGTTTCTGACACTTCAGACA TCCCACGCAAAGCCACATTGAATTTTTGCCAAATGAAAAACACATCCAACAATCAAGTTTCTAAGAAGGTGTCAA GTGGGGAATAATAATGATAATAATCAAGAAATTAGTTTATTAAAAGGAAGCAGAAGCATTGACCATTTTTT CCCAGAGAAGAGGAGAAATCTGTAGTGAGCAAAGGACCATGAATCCTCCTTGAGAAGTAGTACTCTCAGAA AGGAGAAGCGCCACTCAAGTTCTTTTAACCCAAGACTTTAGAGAAATTAGGTCCAAGATTTTTATATGTTCAGTT

PCT/US2003/028547

2074/6881 FIGURE 1909

MAAIPPDSWQPPNVYLETSMGIIVLELYWKHAPKTCKNFAELARRGYYNGTKFHRIIKDFMIQGGDPTGTGRGGA SIYGKQFEDELHPDLKFTGAGILAMANAGPDTNGSQFFVTLAPTQWLDGKHTIFGRVCQGIGMVNRVGMVETNSQ DRPVDDVKIIKAYPSG

PCT/US2003/028547

2075/6881 FIGURE 1910

PCT/US2003/028547

2076/6881 FIGURE 1911

 ${\tt MAGCIQEARERWNFDFVTETPLEGDFAWERVRGLGLPKLYLPTGPRRGRDELGGGRRPGTSPALLQGTAEEDHVDQPGQHGEISTKNTKISWAWWCTLVIPATWKAEVGGSLEPRRQRLQSAEIIPLYSSLFQGDSEIHLKQPGQHGEISTKNTKISWAWWCTLVIPATWKAEVGGSLEPRRQRLQSAEIIPLYSSLFQGDSEIHLKQPGGARGRDG$

WO 2004/030615 PCT/US2003/028547

2077/6881 FIGURE 1912

GGCACTCAGAGGAGGTGAGAGAGCGGCGGCAGACAACAGGGGACCCCGGGCCGGCCCAGAGCCGAGCCAAGC GTGCCCGCGTGTGTCCCTGCGTGTCCGCGAGGATGCGTGTTCGCGGGTGTGTGCTGCGTTCACAGGTGTTTCTGC ${\tt GGCAGGCGCC} \underline{\textbf{ATG}} {\tt TCAGAACCGGCTGGGGATGTCCGTCAGAACCCATGCGGCAGCAAGGCCTGCCGCCGCCTCTT}$ GCGATGGAACTTCGACTTTGTCACCGAGACACCACTGGAGGGTGACTTCGCCTGGGAGCGTGTGCGGGGCCTTGG CTCACCTGCTCTGCTGCAGGGGACAGCAGGAAGACCATGTGGACCTGTCACTGTTCTTGTACCCTTGTGCCTCG CTCAGGGGAGCAGGCTGAAGGGTCCCCAGGTGGACCTGGAGACTCTCAGGGTCGAAAACGGCGGCAGACCAGCAT GACAGATTTCTACCACTCCAAACGCCGGCTGATCTTCTCCAAGAGGAAGCCC<u>TAA</u>TCCGCCCACAGGAAGCCTGC AGTCCTGGAAGCGCGAGGGCCTCAAAGGCCCGCTCTACATCTTCTGCCTTAGTCTCAGTTTGTGTGTCTTAATTA TTATTTGTGTTTTAATTTAAACACCTCCTCATGTACATACCCTGGCCGCCCCCCTGCCCCCAGCCTCTGGCATTA TACTTCCTCCTCCCCACTTGTCCGCTGGGTGGTACCCTCTGGAGGGGTGTGGCTCCTTCCCATCGCTGTCACAGG CGGTTATGAAATTCACCCCCTTTCCTGGACACTCAGACCTGAATTCTTTTTCATTTGAGAAGTAAACAGATGGCA $\tt CTTTGAAGGGGCCTCACCGAGTGGGGGCATCATCAAAAACTTTGGAGTCCCCTCACCTCTAAGGTTGGGCAG$ GGTGACCCTGAAGTGAGCACAGCCTAGGGCTGAGCTGGGGACCTGGTACCCTCCTGGCTCTTGATACCCCCCTCT GTCTTGTGAAGGCAGGGGGAAGGTGGGGTCCTGGAGCAGACCACCCCGCCTGCCCTCATGGCCCCTCTGACCTGC ACTGGGGAGCCCGTCTCAGTGTTGAGCCTTTTCCCTCTTTTGGCTCCCCTGTACCTTTTGAGGAGCCCCAGCTACC CTTCTTCTCCAGCTGGGCTCTGCAATTCCCCTCTGCTGCTGTCCCTTGTCCCTTTCCCTTCAGTACCCTC TCAGCTCCAGGTGGCTCTGAGGTGCCTGTCCCACCCCCACCCCAGCTCAATGGACTGGAAGGGGAAGGGACACA CAAGAAGAAGGGCACCCTAGTTCTACCTCAGGCAGCTCAAGCAGCGACCGCCCCCCCTCTTAGCTGTGGGGGTGA GGGTCCCATGTGGTGGCACAGGCCCCCTTGAGTGGGGTTATCTCTGTGTTAGGGGGTATATGATGGGGGAGTAGAT CTTTCTAGGAGGGAGACACTGGCCCCTCAAATCGTCCAGCGACCTTCCTCATCCACCCCATCCCTCAGGTTCA TTGCACTTTGATTAGCAGCGGAACAAGGAGTCAGACATTTTAAGATGGTGGCAGTAGAGGCTATGGACAGGGCAT GCCACGTGGGCTCATATGGGGCTGGGAGTAGTTGTCTTTCCTGGCACTAACGTTGAGCCCCTGGAGGCACTGAAG TGCTTAGTGTACTTGGAGTATTGGGGTCTGACCCCAAACACCTTCCAGCTCCTGTAACATACTGGCCTGGACTGT TTTCTCTCGGCTCCCCATGTGTCCTGGTTCCCGTTTCTCCACCTAGACTGTAAACCTCTCGAGGGCAGGGACCAC ACCCTGTACTGTTCTGTGTCTTTCACAGCTCCTCCCACAATGCTGAATATACAGCAGGTGCTCAATAAATGATTC TTAGTGACTTTAAAAAAAAAAAAAAAAAAAAAAAAA

PCT/US2003/028547

2078/6881 FIGURE 1913

 ${\tt MSEPAGDVRQNPCGSKACRRLFGPVDSEQLSRDCDALMAGCIQEARERWNFDFVTETPLEGDFAWERVRGLGLPKLYLPTGPRRGRDELGGGRRPGTSPALLQGTAEEDHVDLSLSCTLVPRSGEQAEGSPGGPGDSQGRKRRQTSMTDFYHSKRRLIFSKRKP}$

PCT/US2003/028547

2079/6881 FIGURE 1914

 $\verb|CCGGAGGAAAGCGGGAAGACTCATCGGAGCGTGTGGATTTGAGCCGCCGCATTTTTTAACCCTAGATCTCGAAAT| \\$ GCATCGTGATTCCTGTCCATTGGACTGTAAGGTTTATGTAGGCAATCTTGGAAACAATGGCAACAAGACGGAATT TGAATTTGAAGATCCCCGAGATGCAGCTGATGCAGTCCGAGAGCTAGATGGAAGAACACTATGTGGCTGCCGTGT ${\tt AGATGATTATCGTAGGAGGAGTCCTCCACCTCGTCGCAGAGTCACCATCATGTCTCTCACCACCCTC} \underline{{\tt TGA}}{\tt AT}$ $\verb|CTGCATTAGCCAGTCAACTAGCCCTTTCAGCGTCATGTGACCAGCGCGCCCCATTCAGCTTGGCTGGTGTCGTTT| \\$ CACATGACCCAGGCTGGCCAGTCGTCAGGTTGCACCGCCCTTTGGTTCCCGAGCATGCTGTTTTCTCTCAGCCTT CTCTCCAACCTTAACCAAATCGGCAGCCACCCCGACCGCCCACACATTCCTGGCCAATCAGCTCAGCTGTTT ATTTACCAAATGTCTTCACAACAACTACAGCAGCAGCCTTCGGCTAACAAAAAAGCAGGAAAAATCCACAACAACACCC CCCTTCGCCAACCAACTAAATCCAACGCAACATCTGGCAAAACCTTTTCAGCAAATTCTTCCTGGCCGTCAGTCC GGCAGCCTCACCTCACCATTTCTAGCTTGTTGAAACCCAAAACTAATCTCCAAGAAGGAGGAGCTTCTCTCGCAG ATCCTTCTAGGTCTCGTAGTCGATCTAGGTCAAATGAAAGGAAATAGAAGACAGTTTGCAAGAGAAGTGGTGT ATTTTTAAGATGTTTTAGCTGTTCAAATCTGTTTGTCTCTTGAAACAGTGACACAAAGGTGTAATTCTCTATGGT GCTATAGTTGAACAAGCAGTCTTTAAAAACTGCTGTGAAACACAGGCCATCAGGGAAAACGAAATGCTGCACTAT TAAATTAGAGGTTTTTGAAAAATCCAACTCTCATCCTGGGCAGAGGTTGCCTAGTTGGTATAGAATGTTAAGTTT CAAGAAAGTTTACCTTTGCTTTAGGTCATAAGTTCCTTATTTGATTGCTGTATATGGATACATGGCTGTTCGTGA CATTCTTTATGTGCAAATTTGTGATTTCAAAAATGTCCTGCCAGTTTAAGGGTACATTGTAGAGCCGAACTTTGA GTTACTGTGCAAGATTTTTTTTTCATGCTGTCATTTGTAATATGTTTTGTGAGAATCCTTGGGATTAAAGTTTTG GTTACAAATTGTTCTTTAACTTGAAAGCCTGTTTTTCCTTGCAAACTCAAATCTGTGAGCTTGGTACCAAGTCCA GGTATAACATTCCTATTGGAAGCCATACTTATATTTTCTTGTAAAGTGCTTTTGAATTAATAAAATATTAGCATA ATTGTGTATAGTCAGTTGAACCCACTGTTACCATTGTTCTTATCCCATGGGAAGCAGTTGGTTACACGATTCTTA TTTTATAAGAAACAGCTGAGAGGCACTATGGATTAGTCTTCTGAAGTGAAGGAAATATAGATGTCACCTAAGTGA TAGTTAACCCATTTTTTTTTTTTTTAGGCATAGAAGCCAGTTCAGGGTCCATAATATTTAGTGACCAACATTTTA AAGTATAGCAGCAACCTGGTTCTTAAACACAAAGTAAGTTGCCCATTAACAAATGGCTTTTATCTTTAGCATGAA AACTTTCCACAGGTCTAAAAATTGCTTCCATTTTATAATTTGAGGTGTTGCATGGGAATTCTAAGCTGATCCATC TTAGAAAATGGCAGGTGTTGTAATTTCAAATTTTTGTGCAATTAGATTAAATCATAATGCAACAGT

PCT/US2003/028547

2080/6881 FIGURE 1915

 ${\tt MHRDSCPLDCKVYVGNLGNNGNKTELERAFGYYGPLRSVWVARNPPGFAFVEFEDPRDAADAVRELDGRTLCGCR} \\ {\tt VRVELSNGEKRSRNRGPPPSWGRRPRDDYRRRSPPPRRRVTIMSLLTTL}$

PCT/US2003/028547

2081/6881 FIGURE 1916A

GGTCTCACC<u>ATG</u>GAGCGGAAAGTGCTTGCGCTCCAGGCCCGAAAGAAAGGACCAAGGCCAAGAAGGACAAAGCC CAAAGGAAATCTGAAACTCAGCACCGAGGCTCTGCTCCCCACTCTGAGAGTGATCTACCAGAGCAGGAAGAGGAG ATTCTGGGATCTGATGATGATGAGCAAGAAGATCCTAATGATTATTGTAAAGGAGGTTATCATCTTGTGAAAATT GGAGATCTATTCAATGGGAGATACCATGTGATCCGAAAGTTAGGCTGGGGACACTTTTCAACAGTATGGTTATCA TGGGATATTCAGGGGAAGAAATTTGTGGCAATGAAAGTAGTTAAAAGTGCTGAACATTACACTGAAACAGCACTA GATGAAATCCGGTTGCTGAAGTCAGTTCGCAATTCAGACCCTAATGATCCAAATAGAGAAATGGTTGTTCAACTA CTAGATGACTTTAAAATATCAGGAGTTAATGGAACACATATCTGCATGGTATTTGAAGTTTTGGGGCATCATCTG CTCAAGTGGATCATCAAATCCAATTATCAGGGGCTTCCACTGCCTTGTGTCAAAAAAATTATTCAGCAAGTGTTA CAGGGTCTTGATTATTTACATACCAAGTGCCGTATCATCCACACTGACATTAAACCAGAGAACATCTTATTGTCA GTGAATGAGCAGTACATTCGGAGGCTGGCTGCAGAAGCAACAGAATGGCAGCGATCTGGAGCTCCTCCGCCTTCC GGATCTGCAGTCAGTACTGCTCCCCAGCCTAAACCAGCTGACAAAATGTCAAAGAATAAGAAGAAATTGAAG AAGAAGCAGAAGCGCCAGGCAGAATTACTAGAGAAGCGAATGCAGGAAATTGAGGAAATGGAGAAAGAGTCGGGC CCTGGGCAAAAAAGACCAAACAAGCAAGAAGAATCAGAGAGTCCTGTTGAAAGACCCTTGAAAGAGAACCCACCT AATAAAATGACCCAAGAAAAACTTGAAGAGTCAAGTACCATTGGCCAGGATCAAACGCTTATGGAACGTGATACA ACATTGAGACATAAAGAGGATCTACATAATGCTAATGACTGTGATGTCCAAAATTTGAATCAGGAATCTAGTTTC CTAAGCTCCCAAAATGGAGACAGCACATCTCAAGAAACAGACTCTTGTACACCTATAACATCTGAGGTGTCA AGCATTCGGGCAGAGATACCCTGTGAAGATGAACAAGAGCAAGAACATAACGGACCACTGGACAACAAAGGAAAA TCCACGGCTGGAAATTTTCTTGTTAATCCCCTTGAGCCAAAAAATGCAGAAAAGCTCAAGGTGAAGATTGCTGAC CTTGGAAATGCTTGTTGGCACAAACATTTCACTGAAGATATTCAAACAAGGCAATATCGTTCCTTGGAAGTTCTA TATTTGTTTGAACCTCATTCAGGGGAAGAGTACACTCGAGATGAAGATCACATTGCATTGATCATAGAACTTCTG GGGAAGGTGCCTCGCAAGCTCATTGTGGCAGGAAAATATTCCAAGGAATTTTTCACCAAAAAAAGGTGACCTGAAA CATATCACGAAGCTGAAACCTTGGGGCCTTTTTGAGGTTCTAGTGGAGAAGTATGAGTGGTCGCAGGAAGAGCA GCTGGCTTCACAGATTTCTTACTGCCCATGTTGGAGCTGATCCCTGAGAAGAGAGCCACTGCCGCCGAGTGTCTC AATCCAACATGTTCATTTGGGTTTGCTTACTTGACCCTGTGGAGATCCCCACAGCCATTGGGCATCCTAGGTGAA TTTGGCCTTGGTTGGGCTCTGCCAAAGACTAATGGACTAAAATGTGAAACAGCCTCTTGCCCTGTACCTTTCCTT CCCATTAGGACATCCTTTAAATTATAAGCATCCTTTTTGAAAAGAGCTATGAAGGTGTATGAGCCCATCCTTTTA TTCATTGACTCTAAGAGTCAAATTTTCTAGTGCATATCCTATTGCCAGCATAAGGATGAGGAGGGGGAAAGGGTC TTAATTCTATGTACAGCAGAGACATTAAACTTGCTGTGTCCGGGCTGCATCATCTTCCTGGACTGTTTCTGTTGT TCTCTGTGTTCACATTTTTCCTGCAACTTTTAAGCTACTGTCTTTTTTAAATAGCTATATGAACACCAAATTTG GGTACCATTTTATCACTGTTCAAAGCACTGTCAAATTCCTTTCATCCTTTAATAGTTAAGATCTTTGAATCTTCA GTCTGATTTTTAATGTAAGCAAAAACAGAACCATTGAATAGTAATTTCTTGAGAACCTCAGGTGTTCTATAAACA TTGTATCCATGGCTGGCACTTTACTCATTGCACTTGAGTTTATTGCCCCATAACTAAAGGATCAGGATGATGGTA GAACGGAGATCTGGGTTTCAGAGCTTTCCCATTTAAGAAAAATAGATCTTGAGATTCTGATTCTTTTCCAAACAG TCCCCTGCTTCATGTACAGCTTTTCTTTACCTTACCCAAAATTCTGGCCTTGAAGCAGTTTTCCTCTATGGCT TTGCCTTTCTGATTTTCTCAGAGGCTCGAGTCTTTAATATAACCCCAAATGAAAGAACCAAGGGGAGGGGTGGGA TCTCTGCTGCTATTTCCCTACATAATGTCAATTTTTAACCATAATTTTGACATGATTGAGATGTACTTGAGGCTT ACATATTCCTCCAGTAAGTAATACTGAAGAGCAAAAGAGAGGCAGGATTGGGGTCACAGCCGCTTCTTCAGCATG GACCAAGTGGGCCTTGGGGATTGCAGCGTTCTCGAAGTGGCTGTAGGACTCGAATTTACAGAAAGCCACAGAGGT GCAACTTGAGGCTCTGCTAGCAAGCCACCAGTGAGGCTATTGGGTAACCACCTTTCTATACAGGAGATTGGAATC TACTTTGTCATTTATCCACCACAGTGACAAAGGAAAAGTGGTGCCGTTATGCAATCCATTTAACTCATAAACATA

PCT/US2003/028547

2082/6881 FIGURE 1916B

PCT/US2003/028547

2083/6881 FIGURE 1917

MERKVLALQARKKRTKAKKDKAQRKSETQHRGSAPHSESDLPEQEEEILGSDDDEQEDPNDYCKGGYHLVKIGDL FNGRYHVIRKLGWGHFSTVWLSWDIQGKKFVAMKVVKSAEHYTETALDEIRLLKSVRNSDPNDPNREMVVQLLDD FKISGVNGTHICMVFEVLGHHLLKWIIKSNYQGLPLPCVKKIIQQVLQGLDYLHTKCRIIHTDIKPENILLSVNE QYIRRLAAEATEWQRSGAPPPSGSAVSTAPQPKPADKMSKNKKKKLKKKQKRQAELLEKRMQEIEEMEKESGPGQ KRPNKQEESESPVERPLKENPPNKMTQEKLEESSTIGQDQTLMERDTEGGAAEINCNGVIEVINYTQNSNNETLR HKEDLHNANDCDVQNLNQESSFLSSQNGDSSTSQETDSCTPITSEVSDTMVCQSSSTVGQSFSEQHISQLQESIR AEIPCEDEQEQEHNGPLDNKGKSTAGNFLVNPLEPKNAEKLKVKIADLGNACWHKHFTEDIQTRQYRSLEVLIGS GYNTPADIWSTACMAFELATGDYLFEPHSGEEYTRDEDHIALIIELLGKVPRKLIVAGKYSKEFFTKKGDLKHIT KLKPWGLFEVLVEKYEWSQEEAAGFTDFLLPMLELIPEKRATAAECLRHPWLNS

PCT/US2003/028547

2084/6881 FIGURE 1918A

GTTAGCGGAGCACGGGCAAGGCGGAGAGTGACGGAGTCGGCGAGCCCCCGCGGCGACAGGTTCTCTACTTAAAAG $ext{ACA} ext{ATG} ext{ACTGATGAAGGTGCCAAGAACAATGAAGAAAGCCCCACAGCCACTGTTGCTGAGCAGGGAGAGGAT}$ ATTACCTCCAAAAAAGACAGGGGAGTATTAAAGATTGTCAAAAGAGTGGGGAATGGTGAGGAAACGCCGATGATT GGAGACAAAGTTTATGTCCATTACAAAGGAAAATTGTCAAATGGAAAGAAGTTTGATTCCAGTCATGATAGAAAT GAACCATTTGTCTTTAGTCTTGGCAAAGGCCAAGTCATCAAGGCATGGGACATTGGGGTGGCTACCATGAAGAAA GGAGAGATATGCCATTTACTGTGCAAACCAGAATATGCATATGGCTCGGCTGGCAGTCTCCCTAAAATTCCCTCG CGGAGAACCAAACGGAAAGGAGAGGGATATTCAAATCCAAACGAAGGAGCAACAGTAGAAATCCACCTGGAAGGC CGCTGTGGTGGAAGGATGTTTGACTGCAGAGATGTGGCATTCACTGTGGGCGAAGGAGAAGACCACGACATTCCA ATTGGAATTGACAAAGCTCTGGAGAAAATGCAGCGGGAAGAACAATGTATTTTATATCTTGGACCAAGATATGGT TTTGGAGAGGCAGGGAAGCCTAAATTTGGCATTGAACCTAATGCTGAGCTTATATATGAAGTTACACTTAAGAGC TTCGAAAAGGCCAAAGAATCCTGGGAGATGGATACCAAAGAAAAATTGGAGCAGGCTGCCATTGTCAAAGAGAAA GGAACCGTATACTTCAAGGGAGGCAAATACATGCAGGCGGTGATTCAGTATGGGAAGATAGTGTCCTGGTTAGAG ATGGAATATGGTTTATCAGAAAAGGAATCGAAAGCTTCTGAATCATTTCTCCTTGCTGCCTTTCTGAACCTGGCC ATGTGCTACCTGAAGCTTAGAGAATACACCAAAGCTGTTGAATGCTGTGACAAGGCCCTTGGACTGGACAGTGCC AATGAGAAAGGCTTGTATAGGAGGGGTGAAGCCCAGCTGCTCATGAACGAGTTTGAGTCAGCCAAGGGTGACTTT GAGAAAGTGCTGGAAGTAAACCCCCAGAATAAGGCTGCAAGACTGCAGATCTCCATGTGCCAGAAAAAGGCCAAG GAGCACAACGAGCGGGACCGCAGGATATACGCCAACATGTTCAAGAAGTTTGCAGAGCAGGATGCCAAGGAAGAG GAAGAGAAACCTGAGGGCCACGTA<u>TGA</u>CGCCACGCCAAGGAGGGAAGAGTCCCAGTGAACTCGGCCCCTCCTCAA TGGGCTTTCCCCCAACTCAGGACAGAACAGTGTTTAATGTAAAGTTTGTTATAGTCTATGTGATTCTGGAAGCAA ATGGCAAAACCAGTAGCTTCCCAAAAACAGCCCCCCTGCTGCTGCCCGGAGGGTTCACTGAGGGGTGGCACGGGA AGTTTCTATCAACCTTCAAGTATCCAATTCAGGGTCCCTGGAGATCATCCTAACAATGTGGGGCTGTTAGGTTTT GGTAGGGTAGGGGAAGGAGATAAGCTTTTGTTTTTTAAATGACTGAAGTGCTATAAATGTAGTCTGTTGCATTT TTAACCAACAGAACCCACAGTAGAGGGGTCTCATGTCTCCCCAGTTCCACAGCAGTGTCACAGACGTGAAAGCCA GTGGCTTTCTACCACACACACCCTGTCCCTGGGGGAGTAATTCTGTCATTCCTAAAACACCCTTCAGCAATGATA ATGAGCAGATGAGAGTTTCTGGATTAGCTTTTCCTATTTTCGATGAAGTTCTGAGATACTGAAATGTGAAAAGAG CAATCAGAATTGTGCTTTTTCTCCCCTCCTCTATTCCTTTTAGGGAATAATATTCAATACACAGTACTTCCTCCC AGCATTGCTACTGCTCAGCTTCTTCTTTCATTCTAATCCTTGCTATTAAGAATTTAAGACTTGTGCTTACAATAT TTTTGACCTGGAGTGGATCTATTTACATAGTCATTTAGGATCCATGCAGCTTTTTTTGTCTTTTTAAGATTATTG TTCACCTGCAGGTTTGACACGCAGTTGCTCGCTTTTCCTGCCCTGTCAAGCTTCTCTGTTCTGGCGTGAGTTGTG AAAGAGTTGAAGACAGCTTCCCATGCCGGTACACAGCCAGTAGCCTAAATCTCCAGTACTTGAGCTGACCATTGA ACTAGGGCAAGTCTTAAATGTGTACATGTAGTTGAATTTCAGTCCTTACGGGTAAACAGATTGAGCATGGCTCTC TATTCCCTCAGCCTAAGAAACACTCATGGGAATGCATTTGGCAACCCAAGGAACCATTTGCTTAAACCTGGAACA AAAAGACTTTTATTATTAGATTGGGACCCCCTTCAAACCTAAAAATCAAGTTATTTCCTTTTATAATACTTTTCT TCCCCATGGAACAAATGGGATCAATTTGTGAGTTTTTTCCTTTAATGATAACTAAAATCCCTCTAATTTCTCATT TATGCTTTTGTCTTTTTATGAAATATTTCTTTTAAAAGCCCCAGTCTCACCTACGAAATATGAAGAGCAAAAGC TGATTTTGCTTACTTGCTAAACTGTTGGGAAAGCTCTGTAGAGCATGGTTCCAGTGAGGCCAAGATTGAAATTTG GGTTCTGAGCAAATAACTACAGGGTGCCCATTACCACTCAAGAAGACACTTCACGTATTCTTGTATCAAATTCAA

PCT/US2003/028547

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FIGURE 1918B

PCT/US2003/028547

2086/6881 FIGURE 1919

MTTDEGAKNNEESPTATVAEQGEDITSKKDRGVLKIVKRVGNGEETPMIGDKVYVHYKGKLSNGKKFDSSHDRNE PFVFSLGKGQVIKAWDIGVATMKKGEICHLLCKPEYAYGSAGSLPKIPSNATLFFEIELLDFKGEDLFEDGGIIR RTKRKGEGYSNPNEGATVEIHLEGRCGGRMFDCRDVAFTVGEGEDHDIPIGIDKALEKMQREEQCILYLGPRYGF GEAGKPKFGIEPNAELIYEVTLKSFEKAKESWEMDTKEKLEQAAIVKEKGTVYFKGGKYMQAVIQYGKIVSWLEM EYGLSEKESKASESFLLAAFLNLAMCYLKLREYTKAVECCDKALGLDSANEKGLYRRGEAQLLMNEFESAKGDFE KVLEVNPQNKAARLQISMCQKKAKEHNERDRRIYANMFKKFAEQDAKEEANKAMGKKTSEGVTNEKGTDSQAMEE EKPEGHV

PCT/US2003/028547

2087/6881 FIGURE 1920

PCT/US2003/028547

2088/6881 FIGURE 1921

GCCTCCCGCTCCAGCCCGGCTCATTCCGCACATTCCGGCCAGCCCCCTCCCCACGACCCCCCTTCCCCGGCCCCC CTTGCGGCTCCCTCGGGCCGGCGGAGCGCCCGGCGGAGCCCCCGCGAGCTCGGACCAGGCTCAGCCGCCC AGTGGGCTCAGGCCCAGAGCCAGAGCAACCAGCACAATAGCGTCCAACAGCTGGAACGCCAGCAGCAGCCCGG GGAGGCCCGGGAGGATGGGCCCGAGGGCCTGGACAAGGGCCTGGACAACGATGCGGAGGGCGTGTGGAGCCCGGA CATCGAGCAGAGCTTCCAGGAGGCCCTGGCCATCTACCCGCCCTGCGGCGGGAAGATCATCCTGTCAGACGA GGGCAAGATGTACGGCCGAAATGAGTTGATTGCACGCTATATTAAACTGAGGACGGGGAAGACTCGGACGAGAAA ACAGGTGTCCAGCCACATACAGGTTCTAGCTCGGAAGAAGGTGCGGGAGTACCAGGTTGGCATCAAGGCCATGAA CCTGGACCAGGTCTCCAAGGACAAAGCCCTTCAGAGCATGGCGTCCATGTCCTCTGCCAGATCGTCTCTGCCAG TGTCCTGCAGAACAAGTTCAGCCCACCTTCCCCTCTGCCCCAGGCCGTCTTCTCCACTTCCTCGCGGTTCTGGAG CCAGCCGCCCTGCCGCCGACGCTCAGCAGTTATGAGCCCCTGGCCCCGCTCCCCTCAGCTGCCTCTGTGCC TGTGTGGCAGGACCGTACCATTGCCTCCCGGCTGCGGCTCCTGGAGTATTCAGCCTTCATGGAGGTGCAGCG GGAGGCAGTAGATGTGCGCCAGATCTATGACAAATTCCCCGAGAAAAAGGGAGGATTGAAGGAGCTCTATGAGAA GGGGCCCCTAATGCCTTCTTCCTTGTCAAGTTCTGGGCCGACCTCAACAGCACCATCCAGGAGGGCCCGGGAGC CTTCTATGGGGTCAGCTCTCAGTACAGCTCTGCTGATAGCATGACCATCAGCGTCTCCACCAAGGTGTGCTCCTT TGGCAAACAGGTGGTAGAAAGGTGGAGACTGAGTATGCCAGGCTGGAGAACGGGCGCTTTGTGTACCGTATCCA CCGCTCGCCCATGTGCGAGTACATGATCAACTTCATCCACAAGCTGAAGCACCTGCCCGAGAAGTACATGATGAA CAGCGTGCTGGAGAACTTCACCATCCTGCAGGTGGTCACGAGCCGGGACTCCCAGGAGACCCTGCTTGTCATTGC TTTTGTCTTCGAAGTCTCCACCAGTGAGCACGGGGCCCAGCACCATGTCTACAAGCTCGTCAAAGACTAGGGTGC GGGCGCTGACCCACCATCACCCTGCTCTGCCCAGCCTCGCGTGACCTCAGAGAGGTGGGGATAGGGGACACCTTC AGCCTCCAGCATGTGTGGCCACTGTACCCCCACCCACCCTTGGGGGAGCATGATGGGCAGGTGAGGGCAGGATGG GCGAGCGTAGGTCTCTGGGTTTCAGATGAAGTGCCCAGGCTCCAGGAAGTTGAGGGACCCACAGGAGAGGTGGGC AGAGCTGGAGTTCTCATCCAGGGCTGCTTGTCCCCAGAGCCCAGGTTTATACTACCTCCCTGGGGCGGGGGCTGG ${\tt CCGCAGGGTAGGGGAGGGCTCTGCAGTGGAGTGGAGCCTCATCGAGGGGCGCTGGGTTAGGGGAGCACCTGT}$ $\tt CTGGGCAGACCAGAGGCCCAGAGGGAGAGAGTAGCAGAAGGCTTTTGATTTTTCTCTTGCCTGAGGCTTGAATCT$ GACAAACCCTTGGTGGGCACTGCTCCCTTAGGTTCTTCCCCACCTCAATCTACCTGCCTAGAGTAGCAGCTCCCA GACCCAGTTCTGGGACTGAAGGTTAACCCTTCACCTGCTGTCCCTTCTTAACACCCAGGCCCCAGAGCCAGCTG GGCCTGTCCAGCAGCCACCTGTGGGTATTTATGAGTTTCATATGAAGTACTGTGCCCCTTCCCTCATCCCG ACCCTGCCCGAGCTTCCTGAAGGTCCTCACTGTTTGCATATCGCTCAGGCCACCTCCAAACCCCACCTAGGTTTT ATAATGTATATTATATTTTTTTTTGTGTATTTTTAAAATCCAGCTGTGATGGGTTATATCATAAATGCAGCTTGG GGTTGGAGCAGGGCCCTCAAAGGCCCAGCTCCTGCTC

PCT/US2003/028547

2089/6881 FIGURE 1922

PCT/US2003/028547

2090/6881 FIGURE 1923

MSSKVSRDTLYEAVREVLHGNQRKRRKFLETVELQISLKNYDPQKDKRFSGTVRLKSTPRPKFSVCVLGDQQHCD EAKAVDIPHMDIEALKKLNKNKKLVKKLAKKYDAFLASESLIKQIPRILGPGLNKAGKFPSLLTHNENMVAKVDE VKSTIKFQMKKVLCLAVAVGHVKMTDDELVYNIHLAVNFLVSLLKKNWQNVRALYIKSTMGKPQRLY

PCT/US2003/028547

2091/6881 FIGURE 1924

PCT/US2003/028547

2092/6881 FIGURE 1925

MEGMDVDLDPELMQKFSCLGTTDKDVLISEFQRLLGFQLNPAGCAFFLDMTNWNLQAAIGAYYDFESPNISVPSM SFVEDVTIGEGESIPPDTQFVKTWRIQNSGAEAWPPGVCLKYVGGDQFGHVNMVMVRSLEPQEIADVSVQMCSPS RAGMYQGQWRMCTATGLYYGDVIWVILSVEVGGLLGVTQQLSSFETEFNTQPHRKVEGNFNPFASPQKNRQSDEN NLKDPGGSEFDSISKNTWAPAPDTWAPAPDQTEQDQNRLSQNSVNLSPSSHANNLSVVTYSKGLHGPYPFGQS

PCT/US2003/028547

2093/6881 FIGURE 1926

 $\verb|CCTCCTCATCCTCTTGAGACTGTTGTTTTTTAGAGCTTGATTGTGGGAGAAAAGCTTGTGTGAAATTCCCTC|\\$ TTCACCTCCCACCCCCAAAAATAAAAGGGGGCATAAACTTTATTCCACTGGAGAAGCCCTGGGGGTGGCTGG AGCCAGCCTGCTGAGAAGCGTGGTGCAGCTGGGTCTGGGACTTCACTAGAGCTTACTCTGGAGCACCTATTTTCT GTGCACATGGGAGTGCTCCACTCCCTAGCAGAGCAGAGGGAAGTCTCTGCCAGGTACCCACGCCACAGGCCTCAG GATGCTTTTTGTCTGAGGGCCTCATTAGGCCCAGACTGCTGCTGCTGCTACCAGTCTCCTGAGACACTGCCTCC CTGGAGCCCATGCATGCCCAGCTGTTCTTACTGCTTAGTAGCCTTGAAGCAGCACATCTCCACTGTCCCTGGCAG GATTGTGGGAGGCTTCACAACCCCTGCTTTCCTGACTTCCTCTTCTGCCCAACACTGGGTGCCCCTTCCCAGTTT $\tt CCCAGCAGGGGCTTCATGGGCCACCGTCAGTGGGTCTGGGCCTGCCAGAGTCGTCTTGCTCTTGCTTCT$ AGGCAACCACACTTGGCAAGTTAAATGTCCCAAGCACCTTGTCTCCCTTCCCAAGAACAAACCATTTCTGTGCAC GCCTAGGGCCCCTCTCTGCTCCCCTGCCTAGTGGGGTGGTAGTGGCTACCTCTCAGCCCCAATAGTCCCTGCTCC TCTTAGAATCTTCACCAAGTGGCAGGCCACCTCTGGGCAGGACCACCTGCGTCTGGCACCCAGGAGGTGAGGCAG ACACCATGGTTAGGTGATAGGGTCTGAACCCAGTTGGGGAGACAGAGGGGGTTCAGACTTGGGAAGAATCTGTCAG TGTGCATGGAGTGAGGTGTGTGTGTGGATGGATGTGCACGTGTGCATGCTTTTTTTCTTTTTGCCGTGAGGAC AGTTGAATTTGGGGCATTTTTCTACAAGAAGCAGTCAGCCTTCTCCCCCCATAAGGACTGGCTGTAACCTTAAG CCCATCAAAGTTACTTCCAGCCTGGAGAGAACCTCACCAAACAGCTGGTGTGGCCTGAGGGTGGCCATGGTGGGA AATGGGCATGAGAATAAATACCTCCCCAAATTCAATCTGAGCCCAGCAGGAGGAGGATGGTAGGGTTGCCAGGGCT CAGAAGTGCAAGCTGATTACTCACCCCACCTGCCTCGCCGCACCTTTCCTTTGTTTCCTTGGGTGAATGCAGGA GCAGCAGTGGCTGCCCTTCCCACCTGGACAGTGGTGTGTAGAAAGCCAGCTGGATGTTTGTGGTGGGGCCTCA TGGTGCCTAGGAGGAGATAAAGATGAGGAGGTTTTTCCTTATTGTATAAATGAATATTTGTATGATTAAATTAAC ACACACCAAAAAAAAAAAAAAAAAAAAAA

WO 2004/030615 PCT/US2003/028547

2094/6881 FIGURE 1927

MAFCLRASLGPDCCCWYQSPETLPPWSPCMPSCSYCLVALKQHISTVPGRIVGGFTTPAFLTSSSAQHWVPLPSF PAGASWATVSGSGPARVVLLFLLLLGNHTWQVKCPKHLVSLPKNKPFLCTSLEAR

PCT/US2003/028547

FIGURE 1928

PCT/US2003/028547

FIGURE 1929

GTCTGACTTCCTCCCAGCACATTCCTGCACTCTGCCGTGTCCACACTGCCCCACAGACCCAGTCCTCCAAGCCTG GACTCCCTACAGGCACGCAGCCCTGAGACCTCAGAGGGCCACCCCTTGAGGGTGGCCAGGCCCCAGTGGCCAAC CTGAGTGCTGCCTCTGCCACCAGCCCTGCTGGCCCCTGGTTCCGCTGGCCCCCAGATGCCTGGCTGAGACACGC CAGTGGCCTCAGCTGCCCACACCTCTTCCCGGCCCCTGAAGTTGGCACTGCAGCAGACAGCTCCCTGGGCACCAG ${\tt GCAGCTAACAGACAGCCGCCAGCCCAAACAGCAGCGGC} \underline{{\tt ATG}} {\tt GGCAGCCCAGCCCGGGTCTGAGCAGCGTATC}$ CCCCAGCCACCTCCTGCTGCCCCCGACACGGTGTCGCGGACAGGCTTGGAGAAGGCGGCAGCGGGGGCAGTGGG TCTCGAGAGACGGGACTGGAGTCCCAGTCCACCCGCCACGCCCGAGCAGGGCCTGTCCGCCTTCTACCTCCTA TGAGGAGCCTGAGCAGTGCCCGGTCATTGACAGCCAAGCCCCAGCGGGCAGCCTGGACTTGGTGCCCGGCGGGCT GACCTTGGAGGAGCACTCGCTGGAGCAGGTGCAGTCCATGGTGGTGGGCGAAGTGCTCAAGGACATCGAGACGGC CTGCAAGCTGCTCAACATCACCGCAGATCCCATGGACTGGAGCCCCAGCAATGTGCAGAAGTGGCTCCTGTGGAC AGAGCACCAATACCGGCTGCCCCCCATGGGCAAGGCCTTCCAGGAGCTGGCGGGCAAGGAGCTGTGCGCCATGTC GGAGGAGCAGTTCCGCCAGCGCTCGCCCCTGGGTGGGGATGTGCTGCACGCCCACCTGGACATCTGGAAGTCAGC GGCCTGGATGAAAGAGCGGACTTCACCTGGGGCGATTCACTACTGTGCCTCGACCAGTGAGGAGAGCTGGACCGA CAGCGAGGTGGACTCATCATGCTCCGGGCAGCCCATCCACCTGTGGCAGTTCCTCAAGGAGTTGCTACTCAAGCC CCACAGCTATGGCCGCTTCATTAGGTGGCTCAACAAGGAGAAGGGCATCTTCAAAATTGAGGACTCAGCCCAGGT GGCCCGGCTGTGGGGCATCCGCAAGAACCGTCCCGCCATGAACTACGACAAGCTGAGCCGCTCCATCCGCCAGTA AGGGGGATATGGGTCCTCTGGGGCCTTCGGGACCATGGGGCAGGGGTGCTTCCTCCTCAGGCCCAGCTGCTCCCC TGGAGGACAGAGGGAGACAGGGCTGCTCCCAACACCTGCCTCTGACCCCAGCATTTCCAGAGCAGAGCCTACAG CCACACCTGGCATGGTGCAGGGAGACATCTGCACCCCTGAGTTGGGCAGCCAGGAGTGCCCCCGGGAATGGATAA TAAAGATACTAGAGAACTG

PCT/US2003/028547

2097/6881 FIGURE 1930

MGSASPGLSSVSPSHLLLPPDTVSRTGLEKAAAGAVGLERRDWSPSPPATPEQGLSAFYLSYFDMLYPEDSSWAA KAPGASSREEPPEEPEQCPVIDSQAPAGSLDLVPGGLTLEEHSLEQVQSMVVGEVLKDIETACKLLNITADPMDW SPSNVQKWLLWTEHQYRLPPMGKAFQELAGKELCAMSEEQFRQRSPLGGDVLHAHLDIWKSAAWMKERTSPGAIH YCASTSEESWTDSEVDSSCSGQPIHLWQFLKELLLKPHSYGRFIRWLNKEKGIFKIEDSAQVARLWGIRKNRPAM NYDKLSRSIRQYYKKGIIRKPDISQRLVYQFVHPI

PCT/US2003/028547

2098/6881 FIGURE 1931

CTCGAAGTCCAGCCAGCCCTTGGCCTCCAAGCAGGAAAAGGACGGCACTGAGAAGCGGGGCCGGGGCAGGCCGCG ${\tt CAAGCAGCCTCCGGTGAGTCCCGGGACAGCGCTGGTAGGGAGTCAGAAGGAGCCCAGCGAAGTGCCAACACCTAA}$ TTTGCTCCGCTCCCACCCCCACCCCTTCCCCAGGCCCACCACCACCACCACCACCCCCCATCT TGGTTTGGGGGCGCCCTCTCTGCTCCTTCACTGTTCCCTCTGGCTTCCCATAGTGGGGCCTGGGAGGGTTCCCCT GGCCTTAAAAGGGGCCCAAGCCCCATCTCATCCTGGCACGCCCTACTCCACTGCCCTGGCAGCAGCAGGTGTGGC CAATGGAGGGGGGTGCTGGCCCCAGGATTCCCCCAGCCAAACTGTCTTTGTCACCACGTGGGGCTCACTTTTCA TCCTTCCCCAACTTCCCTAGTCCCCGTACTAGGTTGGACAGCCCCCTTCGGTTACAGGAAGGCAGGAGGGGTGAG TCCCCTACTCCCTCTTCACTGTGGCCACAGCCCCCTTGCCCTCCGCCTGGGATCTGAGTACATATTGTGGTGATG GAGATGCAGTCACTTATTGTCCAGGTGAGGCCCAAGAGCCCTGTGGCCGCCACCTGAGGTGGGCTGGGGCTGCTC CCTGCCCGCTCCCAACCCCCCTCCTGCTCCCTGCCCCCAAGGTTCTGGTTCCATTTTTCCTCTGTTCACAA ${\tt ACTACCTCTGGACAGTTGTTTTTTTTTTTTCAATGTTCCATTCTTCGACATCCGTCATTGCTGCTGCTACCAG}$ CGCCAAATGTTCATCCTCATTGCCTCCTGTTCTGCCCACGATCCCCTCCCCCAAGATACTCTTTGTGGGGAAGAG GGGCTGGGGCATGGCAGGCTGGCTGACCGACTACCCCAGTCCCAGGGAAGGTGGGGCCCTGCCCCTAGGATGCTG CAGCAGAGTGAGCAAGGGGGCCCAAATCGACCATAAAGGGTGTAGGGGCCACCTCCTCCCCCTGTTCTGTTGGGG TATCCTTTTCTGG

PCT/US2003/028547

2099/6881 FIGURE 1932

GGTGGCCACAGAGCAACTTCCTCTAGAGGGAGCTGATTGGAGCCGGGTGCCGCTGGCACCTCTATGATCACTGGA GTCTCGCGGGTCCCTCGGGCTGCACAGGGACAAGTAAAGGCTACATCCAGATGCCGGGAATGCACTGACGCCCAT TCCTGGAAACTGGGCTCCCACTCAGCCCCTGGGAGCAGCCGCCAGCCCCTCGGGACCTCCATCTCCACCCTG CTGAGCCACCCGGGTTGGGCCAGGATCCCGGCAGGCTGATCCCGTCCTCCACTGAGACCTGAAAAATGGCTTCGG GGCAAGGCCCAGGTCCTCCCAGGCAGGAGTGCGGAGAGCCTGCCCTGCCCTCTGCTTCTGCAGGAACAGGAGGCT GAAGGGGTGGCTGCCCTGCCGACCCAGAGATGGTCACCTTACCTCTGCAACCTACAGCACCATGGGGCAGGTGG GACGGCAGCTCGCCATCATCGGGGACGACATCAACCGACGCTATGACTCAGAGTTCCAGACCATGTTGCAGCACC TGCAGCCCACGGCAGAGAATGCCTATGAGTACTTCACCAAGATTGCCACCAGCCTGTTTGAGAGTGGCATCAATT GGGGCCGTGTGGTGGCTCTTCTGGGCTTCGGCTACCGTCTGGCCCTACACGTCTACCAGCATGGCCTGACTGGCT TCCTAGGCCAGGTGACCCGCTTCGTGGTCGACTTCATGCTGCATCACTGCATTGCCCGGTGGATTGCACAGAGGG GTGGCTGGGTGGCAGCCCTGAACTTGGGCAATGGTCCCATCCTGAACGTGCTGGTGGTTCTGGGTGTGGTTCTGT TGGGCCAGTTTGTGGTACGAAGATTCTTCAAATCATGACTCCCAAGGGTGCCCTTTGGGGTCCCGGTTCAGACCC CTGCCTGGACTTAAGCGAAGTCTTTGCCTTCTCTTTCCCTTGCAGGGGTCCCCCCTCAAGAGTACAGAAGCTTT AGCAAGTGTGCACTCCAGCTTCGGAGGGCCCCTGCGTGGGGGCCCAGTCAGGCTGCAGAGGCACCTCAACATTGCA TGGTGCTAGTGGGCCCTCTCTCTGGGCCCAGGGGCTGTGGCCGTCTCCTCAGCTCTCTGGGACCTCCTTAG CCCTGTCTGCTAGGCGCTGGGGAGACTGATAACTTGGGGAGGCAAGAGACTGGGAGCCACTTCTCCCCAGAAAGT GTTTAACGGTTTTAGCTTTTTATAATACCCTTGTGAGAGCCCATTCCCACCATTCTACCTGAGGCCAGGACGTCT GGGGTGTGGGGATTGGTGGGTCTATGTTCCCCAGGATTCAGCTATTCTGGAAGATCAGCACCCTAAGAGATGGGA TTCTGGGCTTGGGGTGGGGTGGGGTGGAGTCGCAGACCAGAGCTGTCTGAACTCACGTGTCAGAAGCCTCCAA CAGGTGAAGGCTCTCACCCCCATCCCTGGGGGCCTTGGGTGAGTGGCCTGCTAAGGCTCCTCCTTGCCCAGACTA CAGGGCTTAGGACTTGGTTTGTTATATCAGGGAAAAGGAGTAGGGAGTTCATCTGGAGGGTTCTAAGTGGGAGAA TAGATGGGGGAACTGTGAATACTTGAACTCTGTTCCCCCACCCTCCATGCTCCACCTGTCTAGGTCTCCTCAG GGTGGGGGGTGACAGTGCCTTCTCTATTGGGCACAGCCTAGGGTCTTGGGGGTCAGGGGGGGAGAAGTTCTTGATT CAGCCAAATGCAGGGAGGGAGGCAGATGGAGCCCATAGGCCACCCCTATCCTCTGAGTGTTTGGAAATAAACT GTGCAATCCCCTC

PCT/US2003/028547

2100/6881 FIGURE 1933

MGQVGRQLAIIGDDINRRYDSEFQTMLQHLQPTAENAYEYFTKIATSLFESGINWGRVVALLGFGYRLALHVYQH GLTGFLGQVTRFVVDFMLHHCIARWIAQRGGWVAALNLGNGPILNVLVVLGVVLLGQFVVRRFFKS

PCT/US2003/028547

FIGURE 1934

PCT/US2003/028547

2102/6881 FIGURE 1935

MDPQRSPLLEVKGNIELKRPLIKAPSQLPLSGSRLKRRPDQMEDGLEPEKKRTRGLGATTKITTSHPRVPSLTTV PQTQGQTTAQKVSKKTGPRCSTAIATGLKNQKPVPAVPVQKSGTSGVPPMAGGKKPSKRPAWDLKGQLCDLNAEL KRCRERTQTLDQENQQLQDQLRDAQQQVKALGTERTTLEGHLAKVQAQAEQGQQELKNLRACVLELEERLSTQEG LVQELQKKQVELQEERRGLMSQLEEKERRLQTSEAALSSSQAEVASLRQETVAQAALLTEREERLHGLEMERRRL HNQLQELKGNIRVFCRVRPVLPGEPTPPPGLLLFPSGFGGPSDPPTRLSLSRSDERRGTLSGAPAPPTRHDFSFD RVFPPGSGQDEVFEEIAMLVQSALDGYPVCIFAYGQTGSGKTFTMEGGPGGDPQLEGLIPRALRHLFSVAQELSG QGWTYSFVASYVEIYNETVRDLLATGTRKGQGGECEIRRAGPGSEELTVTNARYVPVSCEKEVDALLHLARQNRA VARTAQNERSSRSHSVFQLQISGEHSSRGLQCGAPLSLVDLAGSERLDPGLALGPGERERLRETQAINSSLSTLG LVIMALSNKESHVPYRNSKLTYLLQNSLGGSAKMLMFVNISPLEENVSESLNSLRFASKVNQCVIGTAQANRK

PCT/US2003/028547

2103/6881 FIGURE 1936

PCT/US2003/028547

2104/6881 FIGURE 1937

AAGTCCCAGGGAGTGGAGGCCCTTGCCATGGAGCCGTGTGGTGATGTGTGGTAACACCATGTCTGTGCCCCTGC TCAACGATGCTGCCACCGTGTCTGGAGCTGAGCGGGAAACGGCCGTGGTTATTTTTTTACATGGACTTGGAGACA CAGGGCACAGCTGGGCTGACGCCCTCTCCACCATTCGGCTCCCTCACGTCAAGTACATCTGTTCCCATGAGCCTA GGATCCCTGTGACCCTCAACATGAAGATGGTGATGCCCTCCTGGTTTGACCTGATGGGGCTGAGTCCAGATGCCC TCCCTGCCAATCAAATCATCCTGGGAGGCTTTTCACAGGGCCGGGCCCTGTCCCTCTACATGGCCCTCACCTGCC CCCACCCTCTGGCTGGCATCCTGGCTTTGAGCTGCTGGCCGCCTCTGCACCGGGCCTTCCCCCAGGCAGCTAATG GCAGTGCCAAGGACCTGGCCATCCTCCAGTGCCATGGGGAGCTGGACCCCATGGTGCCCGTACGGTTTGGGGCCC TGATGGCTGAGAAGCTCCGGTCTGTTGTCACACCTGCCAGGGTCCAGTTCCAGACATACCTGGGTGTCATGCACA GCTCCTGTCCTCAGGAGATGGCAGCTGTGAAGGAATTTCTTGAGAAGCTGCTGCCTCCTGTCTAACTAGTCGCTG GCCCCAGTGCAGTACCCCAGCTCATGGGGGACTCAGCAAGTAAGCATGGCACCATCTTGGGTCTGAGCTGGTCGA CTTCCTTCCTGGCCTCAGCCACCTGGCTCTGTCTGCAGTAGGGGCAGGCTGCTTTCTTATCCCATTTCCCTGGAG GCGGGCCCCCTGGCAGCAGTATTGGAGGGGCTACAGGCAGCTGGAGAAAGAGGCCCAGCCACTGACCCACTCAC TCAGGACCTCACTCACTAGCCCCACTTTGGGCCCCCTCCTGTAACCTTAGGGTTTGGCCCATGGGGCCCTCCCAG GCCCTGCCCCAACTGATTCTGCCCAGATAATCTTGTGTCTCCTGCCTCCACTCAGCTGCTTCTCAGTCATGAAC GTGGCCATGGCCCGGGGGTCCCCTTGCTGCTGTGGGCTCCCTGTCCCTGGGCAGGAGTGCTGGTGAGGAGGTGG AGCCTTTTGAGGGGGGCCTTCCCTCAGCTGTTTCCCCACACTGGGGGGCCTGGCCCTGCCTCCCCGTTACCCTCC TTCCCTGCAGGCCTGGAGCCTGTAGGGCTGGACTGAGGTTCAGGTCTCCCCCCAGCTGTCTCACCCCCACTTTGT $\tt CCCCACTCTAGAGCAGGGAGGCAGTGGGGGGAGGAGTTGTGTCTTGTCTTCTGTCTCCATGTGGTTTTTGGGTGTT$ TTTCTTCTTGTGTCCTGGATTCTGATAAAATTAAAGAAATTGCTTCCTC

PCT/US2003/028547

2105/6881 FIGURE 1938

PCT/US2003/028547

FIGURE 1939

PCT/US2003/028547

FIGURE 1940

PCT/US2003/028547

2108/6881 FIGURE 1941

PCT/US2003/028547

2109/6881 FIGURE 1942

GCCACCGCTAACAGCATCATCGTGCTGGATGATGATGACGAAGATGAAGCAGCTGCTCAGCCAGGGCCCTCCCAC CCACTCCCCAATGCGGCCTCACCTGGGGCAGAAGCCCCTAGCTCCTCTGAGCCTCATGGGGCCAGAGGAAGCAGT AGTTCGGGCGGCAAGAATGCTACAAGCTGGAGAATGAGAAGCTGTTCGAAGAGTTCCTTGAACTTTGTAAGATG CAGACAGCAGCCACCCTGAGGTGGTCCCATTCCTCTATAACCGGCAGCAACGTGCCCACTCTCTGTTTTTGGCC ATCAATGAGCTCTGCACTGTTCTCAAGGCCCACTCAGCCAAAAAGAAGCTGAACTTGGCCCCTGCCGCCACCACC TCCAATGAGCCCTCTGGGAATAACCCTCCCACACACCTCTCCTTGGACCCCACAAATGCTGAAAACACTGCCTCT CAGTCTCCAAGGACCCGTGGTTCCCGGCGCAGATCCAGCGTTTGGAGCAGCTGCTGGCGCTCTATGTGGCAGAG ATCCGGCGGCTGCAGGAAAAGGAGTTGGATCTCTCAGAATTGGATGACCCAGACTCCGCATACCTGCAGGAGGCA CGGTTGAAGCGTAAGCTGATCCGCCTCTTTGGGCGACTATGTGAGCTGAAAGACTGCTCTTCACTGACCGGCCGT GTCATAGAGCAGCGCATCCCCTACCGTGGCACCCGCTACCCAGAGGTTAACAGGCGCATTGAGCGGCTCATCAAC AAGCCAGGGCCTGATACCTTCCCTGACTATGGGGATGTGCTTCGGGCTGTAGAGAAGGCAGCTGCCCGACACAGC CTTGGCCTCCCCGACAGCAGCTCCAGCTCATGGCTCAGGATGCCTTCCGAGATGTGGGCATCAGGTTACAGGAG CGACGTCACCTCGATCTCATCTACAACTTTGGCTGCCACCTCACAGATGACTATAGGCCAGGCGTTGACCCTGCA CTATCAGATCCTGTGTTGGCCCGGCGCCTTCGGGAAAACCGGAGTTTGGCCATGAGTCGGCTGGATGAGGTCATC TCTTCCCACTCTGCAGACACCCCCGAAGCCTCCTTGGATTCTGGTGAGGGCCCTAGTGGAATGGCATCCCAGGGG GAAGAAGAAGAGGAGGAGGCCACAGATTCTGAAGAGGAGGAGCATCTGGAACAGATGCAGGAGGGTCAGGAGGAT GATGAAGAGGAGGACGAAGAAGAAGCAGCAGCAGGTAAAGATGGAGACAAGAGCCCCATGTCCTCACTACAG ATCTCCAATGAAAAGAACCTGGAACCTGGCAAACAGATCAGCAGATCTTCAGGGGAGCAGCAAAACAAAGGACGC ATAGTGTCACCATCGTTACTGTCAGAAGAACCCCTGGCCCCTCCAGCATAGATGCTGAAAGCAATGGAGAACAG CCTGAGGAGCTGACCCTGGAGGAAGAAGCCCTGTGTCTCAGCTCTTTGAGCTAGAGATTGAAGCTTTGCCCCTG GATACCCCTTCCTCTGTGGAGACGGACATTTCCTCTTCCAGGAAGCAATCAGAGGAGCCCTTCACCACTGTCTTA GAGAATGGAGCAGGCATGGTCTCTTCTACTTCCTTCAATGGAGGCGTCTCTCCTCACAACTGGGGAGATTCTGGT CCCCCTGCAAAAAATCTCGGAAGGAGAAGAAGCAAACAGGATCAGGGCCATTAGGAAACAGCTATGTGGAAAGG CAAAGGTCAGTGCATGAGAAGAATGGGAAAAAGATATGTACCCTGCCCAGCCCACCTTCCCCCTTGGCTTCCTTG GCCCAGTTGCTGATTCCTCCACGAGGGTGGACTCTCCCAGCCATGGCCTGGTGACCAGCTCCCTCTGCATCCCŢ TCTCCAGCCGGCTGTCCCAAACCCCCCATTCACAGCCTCCTCGGCCTGGTACTTGCAAGACAAGTGTGGCCACA ${\tt CAATGCGATCCAGAAGAGATCATCGTGCTCTCAGACTCTGAT} \underline{{\tt TAA}} {\tt CTGCCTCCCCTTCTCCCTGCCTCCAGAATG}$ TTCTGGGATAACATTTGGAGGAAGGTGGGAAGCAGATGACTGAGGAAGGGATGGACTAAGCTAATCCCCTTTTGG TGGTGTTTCTTT

PCT/US2003/028547

2110/6881 FIGURE 1943

MATANSIIVLDDDDEDEAAAQPGPSHPLPNAASPGAEAPSSSEPHGARGSSSSGGKKCYKLENEKLFEEFLELCK
MQTADHPEVVPFLYNRQQRAHSLFLASAEFCNILSRVLSRARSRPAKLYVYINELCTVLKAHSAKKKLNLAPAAT
TSNEPSGNNPPTHLSLDPTNAENTASQSPRTRGSRRQIQRLEQLLALYVAEIRRLQEKELDLSELDDPDSAYLQE
ARLKRKLIRLFGRLCELKDCSSLTGRVIEQRIPYRGTRYPEVNRRIERLINKPGPDTFPDYGDVLRAVEKAAARH
SLGLPRQQLQLMAQDAFRDVGIRLQERRHLDLIYNFGCHLTDDYRPGVDPALSDPVLARRLRENRSLAMSRLDEV
ISKYAMLQDKSEEGERKKRRARLQGTSSHSADTPEASLDSGEGPSGMASQGCPSASRAETDDEDDEESDEEEEE
EEEEEEEATDSEEEEDLEQMQEGQEDDEEEDEEEEAAAGKDGDKSPMSSLQISNEKNLEPGKQISRSSGEQQNKG
RIVSPSLLSEEPLAPSSIDAESNGEQPEELTLEEESPVSQLFELEIEALPLDTPSSVETDISSSRKQSEEPFTTV
LENGAGMVSSTSFNGGVSPHNWGDSGPPCKKSRKEKKQTGSGPLGNSYVERQRSVHEKNGKKICTLPSPPSPLAS
LAPVADSSTRVDSPSHGLVTSSLCIPSPARLSQTPHSQPPRPGTCKTSVATQCDPEEIIVLSDSD

PCT/US2003/028547

FIGURE 1944

GGCACGAGGGCTGAGAAGAGTTTTGCACGTGGATCGCCGTTCGGGTGGGCGAG<u>ATG</u>GAGACAGCCCCCAAGCCGG GCAAGGATGTCCCGCCCAAGAAAGACAAACTTCAGACCAAGAGAAAACCGCGGCGATACTGGGAGGAAGAGA CCGTTCCGACCACAGCCGGAGCCTCCCAGGGCCTCCTCGTAACAAGAAGAATCGGGAGCTCCGTCCTCAGAGAC CAAAAAATGCTTACATCTTAAAGAAGTCTCGGATCTCTAAGAAGCCTCAGGTCCCGAAGAAACCCCGAGAATGGA AGAACCCGGAGTCCCAGCGCGCCTTGTCCGGGGCCCAAGATCCATTCCCAGGCCCCGCCCCCGTCCCTGTGGAAG TGGTCCAGAAGTTCTGTCGCATTGACAAATCCCGAAAGCTACCACATTCTAAAGCCAAAACTCGAAGCCGACTTG GGTTTCTGGAAGGGGAGGATGGGGAAGACACAGCAAAGATATGCCAGGCTGACATTGTGGAGGCTGTGGACATTG CAAGTGCAGCCAAGCACTTTGACTTGAATCTGCGGCAGTTTGGACCCTACAGACTAAACTACTCTCGAACTGGAA GACACCTGGCTTTTGGAGGGCGCCGAGGTCATGTGGCTGCCCTTGATTGGGTAACAAAGAAGCTTATGTGCGAGA GGCTCCACATCTATGACAATCAGGGCATTGAGCTCCACTGTATCCGCCGCTGTGACCGAGTAACACGGCTTGAGT AGATTGTGGCAGCTCTGAATGCTCGAGCTGGGCGGCTCGATGTTATGAGTCAGAACCCTTACAATGCCGTCATCC ATCTCGGACACAGCAATGGTACTGTCTTTATGGAGTCCAGCTATGAAGGAGCCACTGGCAAAGATTCTCTGTC TGAAGATCTTTGACTTGCGAGGGACGTACCAGCCTCTGAGCACTCGGACCCTGCCCCATGGAGCAGGGCACCTGG CCTTCTCCCAGAGGGGACTGCTGGTGGCGGGAATGGGTGACGTTGTCAACATCTGGGCAGGGCAAGGCCA GCCCACCCTCCCTTGAACAGCCCTACCTCACCCACCGGCTCTCAGGCCCTGTGCATGGCCTTCAGTTCTGCCCCT $\tt TTGAAGATGTGCTGGGGGGGGGCACACTGGGGGCCATCACCAGCATGCTGGTCCCTGGGGCCGGTGAGCCCAACT$ TCGATGGCCTGGAGAGTAATCCATACAGAAGCCGGAAGCAGCGCCCAGGAGTGGGAGGTGAAGGCCCTGCTAGAGA AGGTACCTGCAGAGCTTATTTGTCTGGACCCACGAGCCCTGGCCGAGGTGGATGTCATCTCCCTGGAGCAGGGAA AGAAGGAGCAGATAGAGGCTGGGCTATGACCCGCAGGCTAAGGCTCCCTTCCAGCCAAAGCCAAAGCAGAAGG GCCGCAGCTCCACGGCAAGCCTGGTGAAGAGGAAGAGGAAGGTCATGGATGAGGAACACAGGGACAAGGTCCGGC AGAGCCTTCAGCAGCATCATAAGGAGGCGAAGGCCAAGCCCACGGGGGCCCATCTGCCCTGGACAGAT $\verb"TTGTGCGC" \underline{\textbf{TGA}}$ \texttt{GCCAGACTCCAGGGTTGCCTGGGAACAGTCTCTCCCCAAGATCACCTGTAGGGAAATGAGTGTT"}$

PCT/US2003/028547

2112/6881 FIGURE 1945

METAPKPGKDVPPKKDKLQTKRKKPRRYWEEETVPTTAGASPGPPRNKKNRELRPQRPKNAYILKKSRISKKPQV PKKPREWKNPESQRGLSGAQDPFPGPAPVPVEVVQKFCRIDKSRKLPHSKAKTRSRLEVAEAEEEETSIKAARSE LLLAEEPGFLEGEDGEDTAKICQADIVEAVDIASAAKHFDLNLRQFGPYRLNYSRTGRHLAFGGRRGHVAALDWV TKKLMCEINVMEAVRDIRFLHSEALLAVAQNRWLHIYDNQGIELHCIRRCDRVTRLEFLPFHFLLATASETGFLT YLDVSVGKIVAALNARAGRLDVMSQNPYNAVIHLGHSNGTVSLWSPAMKEPLAKILCHRGGVRAVAVDSTGTYMA TSGLDHQLKIFDLRGTYQPLSTRTLPHGAGHLAFSQRGLLVAGMGDVVNIWAGQGKASPPSLEQPYLTHRLSGPV HGLQFCPFEDVLGVGHTGGITSMLVPGAGEPNFDGLESNPYRSRKQRQEWEVKALLEKVPAELICLDPRALAEVD VISLEQGKKEQIERLGYDPQAKAPFQPKPKQKGRSSTASLVKRKRKVMDEEHRDKVRQSLQQQHHKEAKAKPTGA RPSALDRFVR

PCT/US2003/028547

FIGURE 1946

PCT/US2003/028547

FIGURE 1947

MSLVIPEKFQHILRVLNTNIDGRRKIAFAITAIKGVGRRYAHVVLRKADIDLTKRAGELTEDEVERVITIMQNPR QYKIPDWFLNRQKDVKDGKYSQVLANGLDNKLREDLERLKKIRAHRGLRHFWGLRVRGQHTKTTGRRGRTVGVSK KK

PCT/US2003/028547

2115/6881 FIGURE 1948

GGAGAGGATCCCGGAGCCGGTGAGAATTCTCTGTTTTTTCTCTACCATCCTTTCCAGGCCTTTTCCTCACCTAAT GAGTCGTAGAGACGAGGGCCCAGAGAGTCTGTAAAGTGGCTGGTGAAAGATTAGTGTCCCAGGGCCCTACATCCG GGAGGTGGTTCGGGATAAAGAGAACTAGTCTTGGGAACAATGTAGGTGGGAACTTAAGGGAATGGGAGAGCGGCC CATAGAGGTGGACGGAGGGCGCGATTGGAGTAAAGCGGACCCTGTGTAGGTATAGAGTTGAGTCAAGTGGAGTCA CTGCCTCTGTCCCTCTGGTCAGCGTGATGGCCAGAGGCCTGGGGGCCCCCCACTGGGTGGCCGTGGGACTGCTGA CCTGGGCGACCTTGGGGGTTCTGGTGGCTGGACTCGGGGGTCATGACGACCTGCACGACGATCTGCAAGAGGACT TCCATGGCCACAGCCACAGGCACTCACATGAAGATTTCCACCATGGCCACAGCCATGCCCATGGCCACA CTCACGAGAGCATCTGGCATGGACATACCCACGATCACGACCATGGACATTCACATGAGGATTTACACCATGGCC ATAGCCATGGCTACTCCCATGAGAGCCTCTACCACAGAGGACATGGACATGACCATGAGCATAGCCATGGAGGCT ATGGGGAGTCTGGGGCTCCAGGCATCAAGCAGGACCTGGATGCTGTCACTCTCTGGGCTTATGCACTGGGGGCCA CAGTGCTGATCTCAGCAGCTCCATTTTTTGTCCTCTTCCTTATCCCCGTGGAGTCGAACTCTCCCCGGCATCGCT CTCTACTTCAGATCTTGCTCAGTTTTGCTTCCGGTGGGCTCCTGGGAGATGCTTTCCTGCACCTCATTCCTCATG CTCTTGAACCTCATTCTCACCACACTCTGGAGCAACCCGGACATGGACACTCCCACAGTGGCCAGGGCCCCATTC TGTCTGTGGGACTGTGGGTTCTCAGTGGAATTGTTGCCTTTCTTGTCGTGGAGAAATTTGTGAGACATGTGAAAG GAGGACATGGTCACAGTCATGGACATGGACACGCTCACAGTCATACACGTGGAAGTCATGGACATGGAAGACAAG AGCGTTCTACCAAGGAGAAGCAGAGCTCAGAGGAAGAAGAAAAAGGAAACAAGAGGGGTTCAGAAGAGGCGAGGAG GGAGCACAGTACCCAAAGATGGGCCAGTGAGACCTCAGAACGCTGAAGAAGAAAAAAGAGGCTTAGACCTGCGTG TGTCGGGGTACCTGAATCTGGCTGACTTGGCACACACTTCACTGATGGTCTGGCCATTGGGGCTTCCTTTC GAGGGGCCGGGGACTAGGGATCCTGACCACAATGACTGTCCTGCTACATGAAGTGCCCCACGAGGTCGGAGACT TTGCCATCTTGGTCCAGTCTGGCTGCAGCAAAAAGCAGGCGATGCGTCTGCAACTACTGACAGCAGTAGGGGCAC TGGCAGGCACAGCCTGTGCCCTTCTCACTGAAGGAGGAGCAGTGGGCAGTGAAATTGCAGGTGGTGCAGGTCCTG GCTGGGTCCTGCCATTTACTGCAGGTGGCTTTATCTACGTAGCAACAGTGTCTGTGTTGCCCGAGCTGCTGAGGG ACCTTGAGTGAGGGGTGGATAAACTACCCCTGCCCCAAACCTCTACCCCTAACTCCAGGTCAGGGGTGCGTAGAG GCCTTCAAGGGCTGGCAGTCTTACAGAGGCTGGAGCGGTGAGAATGAGAGGCCAGAGGGACCATAGTGTTGGGCA CTGTCTGACCATGTTGCATTTGGAAGGCTAAATGGGGCCATGAAGAAGGCTGGAAGGGACAGGGGGTGATGGCAG CCTACCTGGTGTCCCCTACCCCACCTGTTCTCGGAGAACCAAGTTGCTACACAGGAAGTTCTCCAAGGTCCAGTT TCCTTTCTCCCACCAGTTGGTGGAGGCTTCAGGGAAGACCAGAGTCCTGGACAGAGAGGGTAACAGGAGGAGTCG GGGATAAACATCAAACATCAATCGTGTGTCCTGATTTGGGAGTGATTGGGGGGATGGGGTGGGAGAGGGTTAGTT GGTATTCTCATGGCCTGATTTTTTTTTTTTTCTATTCCTTTTATATCACTGTGTTTGAATCGAGGGGGAGGGGTGG TAACCGGAAATAAAGACCTCCGATCTTCCGCCCC

PCT/US2003/028547

1

2116/6881 FIGURE 1949

 ${\tt GCTCACAGTCATCAATTATAGACCCCACAAC} {\color{red} {\bf ATG}} {\tt CGCCCTGAAGACAGAATGTTCCATATCAGAGCTGTGATCTT}$ GAGAGCCCTCTCCTTGGCTTTCCTGCTGAGTCTCCGAGGAGCTGGGGCCATCAAGGCGGACCATGTGTCAACTTA TGCCGCGTTTGTACAGACGCATAGACCAACAGGGGAGTTTATGTTTGAATTTGATGAAGATGAGATGTTCTATGT GGATCTGGACAAGAAGGAGACCGTCTGGCATCTGGAGGAGTTTGGCCAAGCCTTTTCCTTTGAGGCTCAGGGCGG GCTGGCTAACATTGCTATATTGAACAACAACTTGAATACCTTGATCCAGCGTTCCAACCACACTCAGGCCACCAA CGATCCCCTGAGGTGACCGTGTTTCCCAAGGAGCCTGTGGAGCTGGGCCAGCCCAACACCCTCATCTGCCACAT TGACAAGTTCTTCCCACCAGTGCTCAACGTCACGTGGCTGTCAACGGGGAGCTGGTCACTGAGGGTGTCGCTGA GAGCCTCTTCCTGCCCAGAACAGATTACAGCTTCCACAAGTTCCATTACCTGACCTTTGTGCCCTCAGCAGAGGA CTTCTATGACTGCAGGGTGGAGCACTGGGGGCTTGGACCAGCCGCTCCTCAAGCACTGGGAGGCCCAAGAGCCAAT CCAGATGCCTGAGACAACGGAGACTGTGCTCTGTGCCCTGGGCCTGGTGCTGGGCCTAGTCGGCATCATCGTGGG $\texttt{CACCGTCCTCATCATAAAGTCTCTGCGTTCTGGCCATGACCCCCGGGCCCAGGGGACCCTG} \underline{\textbf{TGA}} \\ \texttt{AATACTGTAAA}$ GGTGACAAAATATCTGAACAGAAGAGGACTTAGGAGAGATCTGAACTCCAGCTGCCCTACAAACTCCATCTCAGC ATTACCTCAAAGCAGTCATTCCTTAGTAAAGTTTCCAACAAATAGAAATTAATGACACTTTGGTAGCACTAATAT GGAGATTATCCTTTCATTGAGCCTTTTATCCTCTGTTCTCCTTTGAAGAACCCCTCACTGTCACCTTCCCGAGAA TACCCTAAGACCAATAAATACTTCAGTATTTC

PCT/US2003/028547

2117/6881 FIGURE 1950

MRPEDRMFHIRAVILRALSLAFLLSLRGAGAIKADHVSTYAAFVQTHRPTGEFMFEFDEDEMFYVDLDKKETVWH LEEFGQAFSFEAQGGLANIAILNNNLNTLIQRSNHTQATNDPPEVTVFPKEPVELGQPNTLICHIDKFFPPVLNV TWLCNGELVTEGVAESLFLPRTDYSFHKFHYLTFVPSAEDFYDCRVEHWGLDQPLLKHWEAQEPIQMPETTETVL CALGLVLGLVGIIVGTVLIIKSLRSGHDPRAQGTL

PCT/US2003/028547

FIGURE 1951A

GGACTGCGGGATAGGAAGCTGGGGATATGGACAAGCAGCAGCGTTATAGCGCTCTGGGTTTCGGGACATAGGCCT GGGCCATGCGGCCCCTTGGCCCCTTGGCGCGACCCCCAGGAACGTTCGGAAAGCTGGTCCTCGTGGCTGGGGGA GCTTCGTTTTCTGGGGGGGGGTTGACACCCCGGATTACATACCCCGTACCAAGCCGAGGGCAACTTTGGAGGCCC CCTGGAAGGCTTTAGGATCCAGATTCTTCGCTGCTGCTGCCTTACCGCCGAGAACCACCACCCGCCAGGCGTCTT GCGGCCACACCCCTGGCGGGTTCAGGCAGGCTACGCCCACGCGACCCCTCCCGTTTCCCTGCTTTGGCCAATGGA GGAGCTACGAATGGCACGACCTGCTCGAGCTTGGCAGTCTCCAGTTGGGCTGTGCATGGAAGCTTGGGAAGACTT TGTTGGAAGGGGAGGCGGGAGAGAGTGCTGGAGGCTCTGGGGCGATGGCTTCCGCACCTCTTCCAACCACCCTC TTTCCCTGGAGTCGGCGGACCACAGCTCAGCCAATTGGCTTGGAGATGTGGCGGGTTGCCACTTCCCTGTGGGTC TCTGCGGCACTCTTCTGCCTGGTGACTGACACCTTGGAAATGAAGTTTATGACGTCATCGTTGCGGCTGGCCAAT AAGGGCTGGCGGGGGCTCGGCGGCGCCATTTCGTGCTGGAGTGGAGCAGCCTCTAGAACGAGCTGGAGGATTCT GCCTACCGATACAGAGCCTTCGAGTCGTCCGGGGCCGCCATTACAATCCACCTCCATCCGCTTGGAAATGGCCTT CGTCCCGGCCTATGACTGGTCCCAGCGGCAGTACAGACCCCCTAGAAGCCCCTTGGAGCTCCCCTTTTTCGGGCC CCGCCCAATCCTCGGAGTCTGTCCACCCCCTCTACTCCGCCCTCAAGAGGATTTCAAAGATGGAGGCGGCGGCTC CCTAAACCACTTTTCGTGTTCATCCGCCTCCATCCGAGATCGAAACGGGACCTCGTCGGCCCCGTAGGGGCCCGA CAAGAAGAGGGAATCCCTGCAGACCAACAGCGGGCTATATTGACGACGGTGTCTGAGATCGGGGACCGTCTTTTG AAGAGTCAGTCCCTCCTTAGTTGCCCGCCTCAGCTGAGGCCGCCGCCATTTTCTTGCTGTCCGCCGTCTGCAGAG GCCTGGAGGCCCAAGAGGAACGGCCTCCCCCAACTTAGCGGGTTATGCTGGACCGGGCGGTGAGGGGAACCGAG GCCACCCGGACTTTCCGCGGCTGAGGGCAGCGCCGGTTCCTTGCGGTCAAGATGCTGCAAAACGTGACTCCCCAC AATAAGCTCCCTGGGGAAGGGAATGCAGGGTTGCTGGGGCTGGGCCCAGAAGCAGCACCAGGGAAAAGGATT CGAAAACCCTCTCTCTTGTATGAGGGCCTTTGAGAGCCCCACAATGGCTTCGGTGCCTGCTTTGCAACTTACCCCT AAGGTAGTGATGAAGGCTCTGTGGAAACATCAGTTCGCATGGCCATTCCGGCAGCCTGTGGATGCTGTCAAACTG GGTCTACCGGATTATCACAAAATTATAAAACAGCCTATGGACATGGGTACTATTAAGAGGGAGACTTGAAAACAAT TATTATTGGGCTGCTTCAGAGTGTATGCAAGATTTTAATACCATGTTCACCAACTGTTACATTTACAACAAGCCC ACTGATGATATTGTCCTAATGGCACAAACGCTGGAAAAGATATTCCTACAGAAGGTTGCATCAATGCCACAAGAA GAACAAGAGCTGGTAGTGACCATCCCTAAGAACAGCCACAAGAAGGGGGCCCAAGTTGGCAGCGCTCCAGGGCAGT CCTACCACTGTCTTCAACATTCCCCACCCATCAGTCATTTCCTCTCCACTTCTCAAGTCCTTGCACTCTGCTGGA GATACTACCACCCTACACCTACAGCCATCTTGGCTCCTGGTTCTCCAGCTAGCCCTCCTGGGAGTCTTGAGCCT AAGGCAGCACGGCTTCCCCCTATGCGTAGAGAGAGTGGTCGCCCCATCAAGCCCCCACGCAAAGACTTGCCTGAC TCTCAGCAACAACACCAGAGCTCTAAGAAAGGAAAGCTTTCAGAACAGTTAAAACATTGCAATGGCATTTTGAAG GAGTTACTCTCTAAGAAGCATGCTGCCTATGCTTGGCCTTTCTATAAACCAGTGGATGCTTCTGCACTTGGCCTG CATGACTACCATGACATCATTAAGCACCCCATGGACCTCAGCACTGTCAAGCGGAAGATGGAGAACCGTGATTAC CGGGATGCACAGGAGTTTGCTGCTGATGTACGGCTTATGTTCTCCAACTGCTATAAGTACAATCCCCCAGATCAC GATGTTGTGGCAATGGCACGAAAGCTACAGGATGTATTTGAGTTCCGTTATGCCAAGATGCCAGATGAACCACTA GAACCAGGGCCTTTACCAGTCTCTACTGCCATGCCCCTGGCTTGGCCAAATCGTCTTCAGAGTCCTCCAGTGAG GAAAGTAGCAGTGAGAGCTCCTCTGAGGAAGAGGAGGAGGAAGATGAGGAGGACGAGGAGGAAGAAGAAGAGAGAAGAA AGCTCAGACTCAGAGGAAGAAAGGGCTCATCGCTTAGCAGAACTACAGGAACAGCTTCGGGCAGTACATGAACAA AAGGCAGAGAAGCATCGAGGCCGAGCTGGGGCCGATGAAGATGACAAGGGGCCTAGGGCACCCCGCCCACCTCAA CCTAAGAAGTCCAAGAAAGCAAGTGGCAGTGGGGGTGGCAGTGCTGTTAGGCCCTTCCGGCTTTGGACCTTCT GGAGGAAGTGGCACCAAGCTCCCCAAAAAGGCCACAAAGACAGCCCCACCTGCCCTACAGGTTATGATTCA

PCT/US2003/028547

2119/6881 FIGURE 1951B

PCT/US2003/028547

FIGURE 1952

GGGCAGAAAGGGCACGCTCTTGTGGGTGACTACAGGTTAGGAGACCGTTGAACCTGGAGGGGCCCTAGGATGGAC CCCGTGGAAAGATTCAGAGACTGCGCCCTCTCCCTGGCGCCGCCTTCCCCTACACGCGGCGGGTATATTCTGTTG $\texttt{CAGTTGGCCCAGGACCTGTTTCCAAGACTCTGCCCCCTCGCACTTCCGTCCCTCGTTTTGTAAAGTG} \underline{\textbf{ATG}} \texttt{CT}$ CATAGGAACCCCCACCCGCGTGACACTACTCCCAGCTCCTGGCTGACTTCTAGTCTTCTGGTTGAAGCTGCGCC TTTAGATGACACGACCCTACCCACCCTGTTTCCAGCGGATGCCCGGGCCTGGAGCCCACAGAATTCTTCCAGTC CCTGGGTGGGGACGGAGAAAGGAACGTTCAGATTGAGATGGCCCATGGCACCACCACGCTCGCCTTCAAGTTCCA GCATGGAGTGATTGCAGCAGTGGATTCTCGGGCCTCAGCTGGGTCCTACATTAGTGCCTTACGGGTGAACAAGGT GATTGAGATTAACCCTTACCTGCTTGGCACCATGTCTGGCTGTGCAGCAGACTGTCAGTACTGGGAGCGCCTGCT GGCCAAGGAATGCAGGCTGTACTATCTGCGAAATGGAGAACGTATTTCAGTGTCGGCAGCCTCCAAGCTGCTGTC CAACATGATGTGCCAGTACCGGGGCATGGGCCTCTCTATGGGCAGTATGATCTGTGGCTGGGATAAGAAGGGTCC TGGACTCTACTACGTGGATGAACATGGGACTCGGCTCTCAGGAAATATGTTCTCCACGGGTAGTGGGAACACTTA TGCCTACGGTGTCATGGACAGTGGCTATCGGCCTAATCTTAGCCCTGAAGAGGCCTATGACCTTGGCCGCAGGGC GGTGAAAGTAGAAAGTACAGATGTCAGTGACCTGCTGCACCAGTACCGGGAAGCCAATCAA<u>TAA</u>TGGTGGTGGTG GCAGCTGGGCAGGTCTCCTCTGGGAGGTCTTGGCCGACTCAGGGACCTAAGCCACGTTAAGTCCAAGGAGAAGAA GAGGCCTAGCCTGAGCCAAAGAGAGAGTACGGGCTCAGCAGCCAGAGGAGGCCGGTGAAGTGCATCTTCTGCGTG TTCTC

PCT/US2003/028547

FIGURE 1953

MLIGTPTPRDTTPSSWLTSSLLVEAAPLDDTTLPTPVSSGCPGLEPTEFFQSLGGDGERNVQIEMAHGTTTLAFK FQHGVIAAVDSRASAGSYISALRVNKVIEINPYLLGTMSGCAADCQYWERLLAKECRLYYLRNGERISVSAASKL LSNMMCQYRGMGLSMGSMICGWDKKGPGLYYVDEHGTRLSGNMFSTGSGNTYAYGVMDSGYRPNLSPEEAYDLGR RAIAYATHRDSYSGGVVNMYHMKEDGWVKVESTDVSDLLHQYREANQ

PCT/US2003/028547

FIGURE 1954

ATTCTTGTCTGTCTGCCTCACTCCCGAGCTCTACTGACTCCCAACAGAGCGCCCCAAGAAGAAAATGGCCATAAG TGGAGTCCCTGTGCTAGGATTTTTCATCATAGCTGTGCTGATGAGCGCTCAGGAATCATGGGCTATCAAAGAAGA ACATGTGATCATCCAGGCCGAGTTCTATCTGAATCCTGACCAATCAGGCGAGTTTATGTTTGACTTTGATGGTGA TGAGATTTTCCATGTGGATATGGCAAAGAAGGAGGGCGGTCTGGCGGCTTGAAGAATTTGGACGATTTGCCAGCTT TGAGGCTCAAGGTGCATTGGCCAACATAGCTGTGGACAAAGCCAACCTGGAAATCATGACAAAGCGCTCCAACTA TACTCCGATCACCAATGTACCTCCAGAGGTAACTGTGCTCACGAACAGCCCTGTGGAACTGAGAGAGCCCAACGT CCTCATCTGTTTCATAGACAAGTTCACCCCACCAGTGGTCAATGTCACGTGGCTTCGAAATGGAAAACCTGTCAC CACAGGAGTGTCAGAGACAGTCTTCCTGCCCAGGGAAGACCACCTTTTCCGCAAGTTCCACTATCTCCCCTTCCT GCCCTCAACTGAGGACGTTTACGACTGCAGGGTGGAGCACTGGGGCTTGGATGAGCCTCTTCTCAAGCACTGGGA GTTTGATGCTCCAAGCCCTCTCCCAGAGACTACAGAGAACGTGGTGTGTGCCCTGGGCCTGACTGTGGGTCTGGT GGGCATCATTATTGGGACCATCTTCATCATCAAGGGATTGCGCAAAAGCAATGCAGCAGAACGCAGGGGGCCTCT GTAAGGCACATGGAGGTGATGGTGTTTCTTAGAGAGAAGATCACTGAAGAAACTTCTGCTTTAATGGCTTTACAA AGCTGGCAATATTACAATCCTTGACCTCAGTGAAAGCAGTCATCTTCAGCATTTTCCAGCCCTATAGCCACCCCA AGAGTGGTTATGCCTCCGATTGCTCCATACTCTAACATCTAGCTGGCTTCCCTGTCTATTGCCTTTTCCTGTA TCTATTTTCCTCTATTTCCTATCATTTTATTATCACCATGCAATGCCTCTGGAATAAAACATACAGGAGTCTGTC TCTGCTATGGAATGCCCCATGGGGCATCTCTTGTGTACTTATTGTTTAAGGTTTCCTCAAACTGTGATTTTTCTG AACACAATAAACTATTTTGAAGATCTTGGGTGGAA

PCT/US2003/028547

2123/6881 FIGURE 1955

GCCGTCTTATCTAAGTCAGAGTCTCCTAAAGAGCCAGAACAACTGAGGAAGCTCTTCATTGGAGGGTTGAGCTTT GAAACAACTGATGAGAGCCTGAGGAGCCATTTTGAGCAGTGAGGGACACTCCCGGACAGTGTGGTCATGAGAGAT CCAAACCCAAGCGCTCCAGGGGCTTTGGATTTTTCACATATGCCACTGTGGAGGAGGTGGATGCAGCCGTGAATG CAAGGCCACACAAGGTGGATGGAAGAGCTGTGGAACCAAAGAGAGCTGTCTCAAGAGAGATTCTCAAATACCAG GTGCCCACTTAACTGTGAAAAAGATATATGCTGGTGGCATTAAAGAAGACACTGAAGAAATCACCTAAGAAATTA CTTTGTAACCTTTGATGACCATGACTCCGTGGATAAGACTGTCATTCAGAAATACCACAGTGTGAATGGCCACAA GGAAACTTTGGTGGTGGTCATGGAGGTGGTTTCGGTGGGAATGACAACTTTGATCATGGAGGAAACTTCAGTGGT TGTGGTAGCTTTGGTGGCAGCTGTGGTGGTGGTGGATATGGTGGCAGTGAGGATGGCTATAATGGATTTGGTAAT GATGGGAGCAATTTTGGAGGTGGTAGAAGCTACAATGATTTTTGGCAATTACAACAATCAGTCTTCAAATTTTTGGA CCCATGAAGGGAGAACTTTGGAGGCAGAAGCTGTGGCCTCTATGGTGGTGGAGGCCAATACTTTGCCAAACCA TGAAACCAAAGTGGCTATTGTGGTTCCAGTAGCAGCAGTAGCTATGGCAGTGGCAGAAGATTTTAATTAGGAAAC AAAGCTTAGCAGGAGAGGAGAGCCAGAGAAGTGACAGGGAAGCTACAGGTTACAACAGATTTGTGAACTCAGCCA AGCACAGTGGTGGCAGGGCCTAGCTGGTACAAAGAAGACATGTTTTAGACAAATACTCATGTGTATGGGCAAAAA ACTCGAGGACTGTATTTGTGACTAATTGTATAACAGGTTATTTTAGTTTCTGTTCTGTGGAAAGTGTAAAGCATT CCAACAAAGGGTTTTAATGTAGATTTTTTTTTGCACCCATGCTGTTTATTGCTAAATGTAATAGTCTGATCGTGA CACTGAAAAA

PCT/US2003/028547

2124/6881 FIGURE 1956

ATGGACGAACGGCTACTGGGGCCGCCCCCCCCAGGCGGGGGGCCGGGGGGCCTGGGATTGGTGAGTGGGGAGCCT GGGGGCCCTGGCGAGCCTCCCGGTGGCGAGACCCCGGTGGGGGTAGCGGGGGGGTCCCGGGAGGCCGAGGGAAG CAAGACATCGGGGACATTCTGCAGCAGATAATGACCATCACCGACCAGAGCCTGGACGAGGCCCAGGCCAAGAAA CACGCCCTAAACTGCCACCGAATGAAGCCTGCTCTTTAGCGTCCTGTGTGAAATCAAGGAGAAAACTGGCCTC AGCATTCGGAGCTCCCAGGAGGAGGAGCCGGTGGACCCACAGCTGATGCGCTTGGACAACATGCTTCTGGCAGAG GGTGTGGCTGGGCCCGAGAAAGGGGGCGGCTCAGCAGCAGCAGCAGCCGCTGCAGCCTCTGGTGGTGTGTG TCCCCTGACAACTCCATCGAACACTCGGACTATCGCAGCAAACTTGCCCAGATCCGTCACATATACCACTCGGAG CTGGAGAAGTATGAGCAGGCATGTAATGAGTTCACGACCCATGTCATGAACCTGCTGAGGGAGCAGAGCCGCACC CTGAAGCAGAGCACCTGCGAGGCTGTGATGATCCTGCGCTCCCGTTTCCTGGATGCCAGACGAAAGCGCCGTAAC TTCAGCAAACAGGCCACTGAGGTCCTAAATGAGTATTTCTACTCCCACCTGAGTAACCCATATCCTAGTGAGGAG GCCAAGGAGGAGCTTGCCAAGAAGTGTGGCATCACCGTGTCTCAGGTCTCCAACTGGTTTGGCAACAAGAGGATT CAGGGGGCCACAGCCCCCGACACCCCCTTCCTCTGCAGGCTCTGGCGGCTCTTTCAATCTCTCA GGATCTGGAGACATGTTTCTGGGGATGCCTGGGCTCAACGGAGATTCCTATTCTGCTTCCCAGGTGGAATCACTC CGACACTCGATGGGGCCAGGGGGCTATGGGGATAACCTCGGGGGAGGCCAGATGTACAGCCCACGGGAAATGAGG GCAAATGGCAGCTGGCAAGAGGCTGTGACCCCCTCTTCAGTGACATCCCCAACGGAGGGACCAGGGAGTGTTCAC AACGAGACTCTCTGTGCTGGGGGTGCTAATTACATGGCAGGAAGAATGGGGCCTCTAAGGGGAGTGTGGGGTCTG AACTATTCTGTTTCTCCCGGGCTCCCCCACTTTCCCTTCCCCACCCCACTTGTATGCTCTGGAATCTGTGGAG ACGCCAGCCCTGCCCAATCAGAGATGCCAAAAATGGGGACATGACTTCTGGACAGAGGACATGGGCCACGCCCCC ATGCATCCCCACCCCCCCCCCCGGACGGCTTACTTACCTCATACGCAGCTCATCTTAAACCAATAGAATCGCT TGTTGTTTTTGTTGTTGGTGGTGGTGGTGGTGGTGGTTCTTAATTTTAATTTAGTTTGGGGAAGTAGCTTG CAAAGGGGTTCTGGTAAGAGAAAGGGGGGACAAACAGAACTGGTAAAGAGGCCCCCCTGGCTCCAGGCCTGTCCAT TTTCTGCCGCATTTGATGTGGAGGCAGTGAAGGGCTTGCCCTGCTGGCCTCTCATCCCCCTTCTTCCCACAACCC TTTTTAAAAAACTACTATTTGAAAATTGGAGGGGGAAGAATGGGAAGGGAGTTATTGCCAAATATGTTAAATATG GGTTGGGGTGCTTGTATATGTATCTTCCTCAATTTCCCCATAAATGAGGTATCTTTTTGTCACACCAAAATCAAG GGGTAGGGAGGGGGGGGGGAAAAAGCCAGATGTGGGGGAAAAGTAACATCAACACTGTCCCATCCTCAGC CCTGAACTAGCTACCATCTGATCCCCTCAGACATTCTCAGGATTTTACAAGACTGTCAGAGTGGGGAACCCCTCC CTTTTT

PCT/US2003/028547

FIGURE 1957A

AGAAGGTAGCAGACAGACAGACGGATCTAACCTCTCTTGGATCCTCCAGCCGGGGTCCCCCTATCGGTGGGGGTGCAGCTCCAGGATGTGCCCCGAGGACAGGTAGTGAAAGGATCAGTGTTCCTG AGAAACCCATCTCGTAATAATGTCCCCTGCTCCCCAAAGGTGGACTTCACCCTTAGCTCAGAAAGAGACTTCGCA CTCCTCAGTCTCCAGGTGCCCTTGAAAGATGCGAAGAGCTGTGGCCTCCATCAACTCCTCAGAGGCCCTGAGGTC CAGCTGGTGGCCCATTCGCCATGGCTAAAGGACTCTCTGTCCAGAACGACAAACATCCAGGGTATCAACCTGCTC TTCTCCTCTCGCCGGGGGCACCTCTTTTTGCAGACGGACCAGCCCATTTACAACCCTGGCCAGCGGGTTCGGTAC CGGGTCTTTGCTCTGGATCAGAAGATGCGCCCGAGCACTGACACCATCACAGTCATGGTGGAGAACTCTCACGGC CTCCGCGTGCGGAAGAAGGAGGTGTACATGCCCTCGTCCATCTTCCAGGATGACTTTGTGATCCCAGACATCTCA GAGCCAGGGACCTGGAAGATCTCAGCCCGATTCTCAGATGGCCTGGAATCCAACAGCAGCACCCAGTTTGAGGTG AAGAAATATGTCCTTCCCAACTTTGAGGTGAAGATCACCCCTGGAAAGCCCTACATCCTGACGGTGCCAGGCCAT CTTGATGAAATGCAGTTAGACATCCAGGCCAGGTACATCTATGGGAAGCCAGTGCAGGGGGTGGCATATGTGCGC CAGAGCCACATTTCCCTCTCAAAGGCAGAGTTCCAGGACGCCCTGGAGAAGCTGAATATGGGCATTACTGACCTC CAGGGGCTGCGCCTCTACGTTGCTGCAGCCATCATTGAGTATCCAGGTGGGGAGATGGAGGAGGCAGAGCTCACA TCCTGGTATTTTGTGTCATCTCCCTTCTCCTTGGATCTTAGCAAGACCAAGCGACACCTTGTGCCTGGGGCCCCC TTCCTGCTGCAGGCCTTGGTCCGTGAGATGTCAGGCTCCCCAGCTTCTGGCATTCCTGTCAAAGTTTCTGCCACG GTGTCTTCTCCTGGGTCTGTTCCTGAAGTCCAGGACATTCAGCAAAACACAGACGGGAGCGGCCAAGTCAGCATT CCAATAATTATCCCTCAGACCATCTCAGAGCTGCAGCTCTCAGTATCTGCAGGCTCCCCACATCCAGCGATAGCC AGGCTCACTGTGGCAGCCCCACCTTCAGGAGGCCCCGGGTTTCTGTCTATTGAGCGGCCGGATTCTCGACCTCCT CGTGTTGGGGACACTCTGAACCTGAACTTGCGAGCCGTGGGCAGTGGGGCCACCTTTTCTCATTACTACTACATG ATCCTATCCCGAGGGCAGATCGTGTTCATGAATCGAGAGCCCAAGAGGACCCTGACCTCGGTCTCGGTGTTTGTG GACCATCACCTGGCACCCTCCTTCTACTTGTGGCCTTCTACTACCATGGAGACCACCCAGTGGCCAACTCCCTG GGGGAGTCCGTGAAGCTCCACTTAGAAACCGACTCCCTAGCCCTGGTGGCGCTGGGAGCCTTGGACACAGCTCTG TATGCTGCAGGCAGCAAGTCCCACAAGCCCCTCAACATGGGCAAGGTCTTTGAAGCTATGAACAGCTATGACCTC GGCTGTGGTCCTGGGGGTGGGGACAGTGCCCTTCAGGTGTTCCAGGCAGCGGGCCTGGCCTTTTCTGATGGAGAC CAGTGGACCTTATCCAGAAAGAGACTAAGCTGTCCCAAGGAGAAGACAACCCGGAAAAAGAGAAAACGTGAACTTC CAAAAGGCGATTAATGAGAAATTGGGTCAGTATGCTTCCCCGACAGCCAAGCGCTGCTGCCAGGATGGGGTGACA CGTCTGCCCATGATGCGTTCCTGCGAGCAGCGGGCAGCCCGCGTGCAGCCGGGACTGCCGGGAGCCCTTCCTG TCCTGCTGCCAATTTGCTGAGAGTCTGCGCAAGAAGAGCAGGGCAAAGGGCCCAGGCGGGCCTCCAACGAGCCCTG GAGATCCTGCAGGAGGACCTGATTGATGAGGATGACATTCCCGTGCGCAGCTTCTTCCCAGAGAACTGGCTC TGGAGAGTGGAAACAGTGGACCGCTTTCAAATATTGACACTGTGGCTCCCCGACTCTCTGACCACGTGGGAGATC CATGGCCTGAGCCTGTCCAAAACCAAAGGCCTATGTGTGGCCACCCCAGTCCAGCTCCGGGTGTTCCGCGAGTTC CACCTGCACCTCCGCCTGCCCATGTCTGTCCGCCGCTTTGAGCAGCTGGAGCTGCGGCCTGTCCTCTATAACTAC GTGTCTCTGAAGGTGGTGGCTCGAGGGTCCTTCGAATTCCCTGTGGGAGATGCGGTGTCCAAGGTTCTGCAGATT GAGAAGGAAGGGCCATCCATAGAGAGGAGCTGGTCTATGAACTCAACCCCTTGGACCACCGAGGCCGGACCTTG GAAATACCTGGCAACTCTGATCCCAATATGATCCCTGATGGGGACTTTAACAGCTACGTCAGGGTTACAGCCTCA GATCCATTGGACACTTTAGGCTCTGAGGGGGCCTTGTCACCAGGAGGCGTGGCCTCCTCTTGAGGCTTCCTCGA TGGAGCACACTGCCTCCCGAGACCAAGGACCACGCCGTGGATCTGATCCAGAAAGGCTACATGCGGATCCAGCAG TTTCGGAAGGCGGATGGTTCCTATGCGGCTTGGTTGTCACGGGGCAGCACCTGGCTCACAGCCTTTGTGTTG AAGGTCCTGAGTTTGGCCCAGGAGCAGGTAGGAGGATCGCCTGAGAAACTGCAGGAGACATCTAACTGGCTTCTG TCCCAGCAGCAGGCTGACGGCTCGTTCCAGGACCTCTCTCCAGTGATACATAGGAGCATGCAGGGGGGTTTGGTG GGCAATGATGAGACTGTGGCACTCACAGCCTTTGTGACCATCGCCCTTCATCATGGGCTGGCCGTCTTCCAGGAT GAGGGTGCAGAGCCATTGAAGCAGAGAGTGGAAGCCTCCATCTCAAAGGCAAGCTCATTTTTGGGGGAGAAAGCA

PCT/US2003/028547

2126/6881 FIGURE 1957B

AGTGCTGGGCTCCTGGGTGCCCACGCAGCTGCCATCACGGCCTATGCCCTGACACTGACCAAGGCCCCTGCGGAC CTGCGGGGTGTTGCCCACAACAACCTCATGGCAATGGCCCAGGAGACTGGAGATAACCTGTACTGGGGCTCAGTC ACTGGTTCTCAGAGCAATGCCGTGTCGCCCACCCCGGCTCCTCGCAACCCATCCGACCCCATGCCCCAGGCCCCA GCCCTGTGGATTGAAACCACAGCCTACGCCCTGCTGCACCTCCTGCTTCACGAGGGCAAAGCAGAGATGGCAGAC ${\tt CAGGCTGCGGCCTGGCTCACCCGTCAGGGCAGCTTCCAAGGGGGATTCCGCAGTACCCAAGACACGGTGATTGCC}$ CTGGATGCCCTGTCTGCCTACTGGATTGCCTCCCACACCACTGAGGAGGGGTCTCAATGTGACTCTCAGCTCC ACAGGCCGGAATGGGTTCAAGTCCCACGCGCTGCAGCTGAACAACCGCCAGATTCGCGGCCTGGAGGAGCTG CAGTTTTCCTTGGGCAGCAAGATCAATGTGAAGGTGGGAGGAAACAGCAAAGGAACCCTGAAGGTCCTTCGTACC TACAATGTCCTGGACATGAAGAACACGACCTGCCAGGACCTACAGATAGAAGTGACAGTCAAAGGCCACGTCGAG TACACGATGGAAGCAAACGAGGACTATGAGGACTATGAGTACGATGAGCTTCCAGCCAAGGATGACCCAGATGCC GTGGAGGAGCAGGAGTCCAGGGTGCACTACACCGTGTGCATCTGGCGGAACGGCAAGGTGGGGCTGTCTGGCATG GACCGTTACGTGAGTCACTTTGAGACCGAGGGGCCCCACGTCCTGCTGTATTTTGACTCGGTCCCCACCTCCCGG GAGTGCGTGGGCTTTGAGGCTGTGCAGGAAGTGCCGGTGGGGCTGGTGCAGCCGGCCAGCGCAACCCTGTACGAC TACTACAACCCCGAGCGCAGATGTTCTGTGTTTTACGGGGCACCAAGTAAGAGCAGACTCTTGGCCACCTTGTGT TCTGCTGAAGTCTGCCAGTGTGCTGAGGGGAAGTGCCCTCGCCAGCGTCGCGCCCTGGAGCGGGGTCTGCAGGAC GAGGATGGCTACAGGATGAAGTTTGCCTGCTACTACCCCCGTGTGGAGTACGGCTTCCAGGTTAAGGTTCTCCGA GAAGACAGCAGAGCTGCTTTCCGCCTCTTTGAGACCAAGATCACCCAAGTCCTGCACTTCACCAAGGATGTCAAG GCCGCTGCTAATCAGATGCGCAACTTCCTGGTTCGAGCCTCCTGCCGCCTTCGCTTGGAACCTGGGAAAGAATAT TTGATCATGGGTCTGGATGGGGCCACCTATGACCTCGAGGGACACCCCCAGTACCTGCTGGACTCGAATAGCTGG ATCGAGGAGATGCCCTCTGAACGCCTGTGCCGGAGCACCCCGCCAGCGGGCAGCCTGTGCCCAGCTCAACGACTTC GGGAACCATGAAGCTGGAAGCACTGCTGTGTCCGCTTTCATGAACACAGCCTGGGACCAGGGCATATTAAAGGCT TTTGGCAGCAAAGTGTCAGTGTTGGC

PCT/US2003/028547

2127/6881 FIGURE 1958

 $exttt{MRLLWGLIWASSFFTLSLQKPRLLLFSPSVVHLGVPLSVGVQLQDVPRGQVVKGSVFLRNPSRNNVPCSPKVDFT}$ LSSERDFALLSLQVPLKDAKSCGLHQLLRGPEVQLVAHSPWLKDSLSRTTNIQGINLLFSSRRGHLFLQTDQPIY NPGQRVRYRVFALDQKMRPSTDTITVMVENSHGLRVRKKEVYMPSSIFQDDFVIPDISEPGTWKISARFSDGLES NSSTQFEVKKYVLPNFEVKITPGKPYILTVPGHLDEMQLDIQARYIYGKPVQGVAYVRFGLLDEDGKKTFFRGLE SQTKLVNGQSHISLSKAEFQDALEKLNMGITDLQGLRLYVAAAIIEYPGGEMEEAELTSWYFVSSPFSLDLSKTK RHLVPGAPFLLQALVREMSGSPASGIPVKVSATVSSPGSVPEVQDIQQNTDGSGQVSIPIIIPQTISELQLSVSA GSPHPAIARLTVAAPPSGGPGFLSIERPDSRPPRVGDTLNLNLRAVGSGATFSHYYYMILSRGQIVFMNREPKRT LTSVSVFVDHHLAPSFYFVAFYYHGDHPVANSLRVDVQAGACEGKLELSVDGAKQYRNGESVKLHLETDSLALVA LGALDTALYAAGSKSHKPLNMGKVFEAMNSYDLGCGPGGGDSALQVFQAAGLAFSDGDQWTLSRKRLSCPKEKTT RKKRNVNFQKAINEKLGQYASPTAKRCCQDGVTRLPMMRSCEQRAARVQQPDCREPFLSCCQFAESLRKKSRDKG QAGLQRALEILQEEDLIDEDDIPVRSFFPENWLWRVETVDRFQILTLWLPDSLTTWEIHGLSLSKTKGLCVATPV QLRVFREFHLHLRLPMSVRRFEQLELRPVLYNYLDKNLTVSVHVSPVEGLCLAGGGGLAQQVLVPAGSARPVAFS VVPTAAAAVSLKVVARGSFEFPVGDAVSKVLQIEKEGAIHREELVYELNPLDHRGRTLEIPGNSDPNMIPDGDFN SYVRVTASDPLDTLGSEGALSPGGVASLLRLPRGCGEQTMIYLAPTLAASRYLDKTEQWSTLPPETKDHAVDLIQ KGYMRIQQFRKADGSYAAWLSRGSSTWLTAFVLKVLSLAQEQVGGSPEKLQETSNWLLSQQQADGSFQDLSPVIH RSMQGGLVGNDETVALTAFVTIALHHGLAVFQDEGAEPLKQRVEASISKASSFLGEKASAGLLGAHAAAITAYAL TLTKAPADLRGVAHNNLMAMAQETGDNLYWGSVTGSQSNAVSPTPAPRNPSDPMPQAPALWIETTAYALLHLLLH EGKAEMADQAAAWLTRQGSFQGGFRSTQDTVIALDALSAYWIASHTTEERGLNVTLSSTGRNGFKSHALQLNNRQ IRGLEEELQFSLGSKINVKVGGNSKGTLKVLRTYNVLDMKNTTCQDLQIEVTVKGHVEYTMEANEDYEDYEYDEL PAKDDPDAPLQPVTPLQLFEGRRNRRREAPKVVEEQESRVHYTVCIWRNGKVGLSGMAIADVTLLSGFHALRAD LEKLTSLSDRYVSHFETEGPHVLLYFDSVPTSRECVGFEAVQEVPVGLVQPASATLYDYYNPERRCSVFYGAPSK SRLLATLCSAEVCQCAEGKCPRQRRALERGLQDEDGYRMKFACYYPRVEYGFQVKVLREDSRAAFRLFETKITQV LHFTKDVKAAANQMRNFLVRASCRLRLEPGKEYLIMGLDGATYDLEGHPQYLLDSNSWIEEMPSERLCRSTRQRA ACAQLNDFLQEYGTQGCQV

PCT/US2003/028547

FIGURE 1959

GCCAGGACACCATCCTGCCCCAGGCCCAGCTTCTCTCCTGCCTTCCAACGCCATCGGGAGCAATCTCAGCCCC CAACTCTGCCTGATGCCCTTTATCTTGGGCCTCTTGTCTGGAGGTGTGACCACCACTCCATGGTCTTTGGCCCAG CCCCAGGGATCCTGCTCTCTGGAGGGGGTAGAGATCAAAGGCGGCTCCTTCCGACTTCTCCAAGAGGGCCAGGCA CTGGAGTACGTGTGCCTTCTGGCTTCTACCCGTACCCTGTGCAGACACGTACCTGCAGATCTACGGGGTCCTGG AGCACCCTGAAGACTCAAGACCAAAAGACTGTCAGGAAGGCAGAGTGCAGAGCAATCCACTGTCCAAGACCACAC GACGGTTACACTCTCCGGGGCTCTGCCAATCGCACCTGCCAAGTGAATGGCCGGTGGAGTGGGCAGACAGCGATC CTTGAAGACAGCGTCACCTACCACTGCAGCCGGGGGCTTACCCTGCGTGGCTCCCAGCGGCGAACGTGTCAGGAA GGTGGCTCTTGGAGCGGACGGAGCCTTCCTGCCAAGACTCCTTCATGTACGACACCCCTCAAGAGGTGGCCGAA GCTTTCCTGTCTTCCCTGACAGAGACCATAGAAGGAGTCGATGCTGAGGATGGGCACGGCCCAGGGGAACAACAG AAGCGGAAGATCGTCCTGGACCCTTCAGGCTCCATGAACATCTACCTGGTGCTAGATGGATCAGACAGCATTGGG GCCAGCAACTTCACAGGAGCCAAAAAGTGTCTAGTCAACTTAATTGAGAAGGTGGCAAGTTATGGTGTGAAGCCA AGATATGGTCTAGTGACATATGCCACATACCCCAAAATTTGGGTCAAAGTGTCTGAAGCAGACAGCAGTAATGCA GACTGGGTCACGAAGCAGCTCAATGAAATCAATTATGAAGACCACAAGTTGAAGTCAGGGACTAACACCAAGAAG GCCCTCCAGGCAGTGTACAGCATGATGAGCTGGCCAGATGACGTCCCTCCTGAAGGCTGGAACCGCACCCGCCAT GTCATCATCCTCATGACTGATGGATTGCACAACATGGGCGGGGACCCAATTACTGTCATTGATGAGATCCGGGAC TTGCTATACATTGGCAAGGATCGCAAAAACCCAAGGGAGGATTATCTGGATGTCTATGTGTTTGGGGTCGGGCCT ATGGAAAACCTGGAAGATGTTTTCTACCAAATGATCGATGAAAGCCAGTCTCTGAGTCTCTGTGGCATGGTTTGG GAACACAGGAAGGGTACCGATTACCACAAGCAACCATGGCAGGCCAAGATCTCAGTCATTCGCCCTTCAAAGGGA CACGAGAGCTGTATGGGGGCTGTGGTGTCTGAGTACTTTGTGCTGACAGCAGCACATTGTTTCACTGTGGATGAC AAGGAACACTCAATCAAGGTCAGCGTAGGAGGGGGAGAAGCGGGACCTGGAGATAGAAGTAGTCCTATTTCACCCC AACTACAACATTAATGGGAAAAAAGAAGCAGGAATTCCTGAATTTTATGACTATGACGTTGCCCTGATCAAGCTC AAGAATAAGCTGAAATATGGCCAGACTATCAGGCCCATTTGTCTCCCCTGCACCGAGGGAACAACTCGAGCTTTG AGGCTTCCTCCAACTACCACTTGCCAGCAACAAAAGGAAGAGCTGCTCCCTGCACAGGATATCAAAGCTCTGTTT GTGTCTGAGGAGGAGAAAAAGCTGACTCGGAAGGAGGTCTACATCAAGAATGGGGATAAGAAAGGCAGCTGTGAG AGAGATGCTCAATATGCCCCAGGCTATGACAAAGTCAAGGACATCTCAGAGGTGGTCACCCCTCGGTTCCTTTGT ACTGGAGGAGTGAGTCCCTATGCTGACCCCAATACTTGCAGAGGTGATTCTGGCGGCCCCTTGATAGTTCACAAG AGAAGTCGTTTCATTCAAGTTGGTGAATCAGCTGGGGGGTAGTGGGATGTCTGCAAAAACCAGAAGCGGCAAAAG CAGGTACCTGCTCACGCCCGAGACTTTCACATCAACCTCTTTCAAGTGCTGCCCTGGCTGAAGGAGAAACTCCAA ${\tt GATGAGGATTTGGGTTTTCTA} \underline{{\tt TAA}}{\tt GGGGTTTCCTGCTGGACAGGGGGGGGGATTGAATTAAAACAGCTGCGACA}$ AC

PCT/US2003/028547

2129/6881 FIGURE 1960

MGSNLSPQLCLMPFILGLLSGGVTTTPWSLAQPQGSCSLEGVEIKGGSFRLLQEGQALEYVCPSGFYPYPVQTRT CRSTGSWSTLKTQDQKTVRKAECRAIHCPRPHDFENGEYWPRSPYYNVSDEISFHCYDGYTLRGSANRTCQVNGR WSGQTAICDNGAGYCSNPGIPIGTRKVGSQYRLEDSVTYHCSRGLTLRGSQRRTCQEGGSWSGTEPSCQDSFMYD TPQEVAEAFLSSLTETIEGVDAEDGHGPGEQQKRKIVLDPSGSMNIYLVLDGSDSIGASNFTGAKKCLVNLIEKV ASYGVKPRYGLVTYATYPKIWVKVSEADSSNADWVTKQLNEINYEDHKLKSGTNTKKALQAVYSMMSWPDDVPPE GWNRTRHVIILMTDGLHNMGGDPITVIDEIRDLLYIGKDRKNPREDYLDVYVFGVGPLVNQVNINALASKKDNEQ HVFKVKDMENLEDVFYQMIDESQSLSLCGMVWEHRKGTDYHKQPWQAKISVIRPSKGHESCMGAVVSEYFVLTAA HCFTVDDKEHSIKVSVGGEKRDLEIEVVLFHPNYNINGKKEAGIPEFYDYDVALIKLKNKLKYGQTIRPICLPCT EGTTRALRLPPTTTCQQQKEELLPAQDIKALFVSEEEKKLTRKEVYIKNGDKKGSCERDAQYAPGYDKVKDISEV VTPRFLCTGGVSPYADPNTCRGDSGGPLIVHKRSRFIQVGVISWGVVDVCKNQKRQKQVPAHARDFHINLFQVLP WLKEKLQDEDLGFL

PCT/US2003/028547

FIGURE 1961

GGTCCCAAGGCTTTCCAGAGCGAACCTGTGCGGCTGCAGGCACCGGCGTGTTGAGTTTCCGGCGTTCCGAAGGAC TGAGCTCTTGTCGCGGATCCCGTCCGCCGTTTCCAGCCCCCAGTCTCAGAGCGGAGCCCACAGAGCAGGGCACCG $\texttt{GC} \underline{\textbf{ATG}} \texttt{GCCAAAGCCGCGGCGATCGACCTGGGCACCACCTACTCCTGCGTGGGGGTGTTCCAACACGGCA}$ AGGTGGAGATCATCGCCAACGACCAGGGCAACCGCACCACCCCCAGCTACGTGGCCTTCACGGACACCGAGCGGC TCATCGGGGATGCGGCCAAGAACCAGGTGGCGCTGAACCCGCAGAACACCGTGTTTGACGCGAAGCGGCTGATCG GCCGCAAGTTCGGCGACCCGGTGGTGCAGTCGGACATGAAGCACTGGCCTTTCCAGGTGATCAACGACGGAGACA AGCCCAAGGTGCAGGTGAGCTACAAGGGGGAGACCAAGGCATTCTACCCCGAGGAGATCTCGTCCATGGTGCTGA CCAAGATGAAGGAGATCGCCGAGGCGTACCTGGGCTACCCGGTGACCAACGCGGTGATCACCGTGCCGGCCTACT TCAACGACTCGCAGCGCCAGGCCACCAAGGATGCGGGTGTGATCGCGGGGCTCAACGTGCTGCGGATCATCAACG AGCCCACGGCCGCCATCGCCTACGGCCTGGACAGAACGGGCAAGGGGGAGCGCAACGTGCTCATCTTTGACC TGGGCGGGGCACCTTCGACGTGTCCATCCTGACGATCGACGACGCATCTTCGAGGTGAAGGCCACGGCCGGG ACACCCACCTGGGTGGGGGGGCTTTGACAACAGGCTGGTGAACCACTTCGTGGAGGAGTTCAAGAGAAAACACA AGAAGGACATCAGCCAGAACAAGCGAGCCGTGAGGCGGCTGCGCACCGCCTGCGAGAGGGCCAAGAGGACCCTGT CGTCCAGCACCCAGGCCAGCCTGGAGATCGACTCCCTGTTTGAGGGCATCGACTTCTACACGTCCATCACCAGGG CGAGGTTCGAGGAGCTGTGCTCCGACCTGTTCCGAAGCACCCTGGAGCCCGTGGAGAAGGCTCTGCGCGACGCCA AGCTGGACAAGGCCCAGATTCACGACCTGGTCCTGGTCGGGGGCTCCACCCGCATCCCCAAGGTGCAGAAGCTGC TGCAGGACTTCTTCAACGGGCGCGACCTGAACAAGAGCATCAACCCCGACGAGGCTGTGGCCTACGGGGCGGCGG TGCAGGCGGCCATCCTGATGGGGGACAAGTCCGAGAACGTGCAGGACCTGCTGCTGCTGGACGTGGCTCCCCTGT CGCTGGGGCTGAGACGCCGGAGGCGTGATGACTGCCCTGATCAAGCGCAACTCCACCATCCCCACCAAGCAGA CGCAGATCTTCACCACCTACTCCGACAACCAACCCGGGGTGCTGATCCAGGTGTACGAGGGCGAGAGGGCCATGA CGAAAGACAACATCTGTTGGGGCGCTTCGAGCTGAGCGGCATCCCTCCGGCCCCAGGGGGCGTGCCCCAGATCG AGGTGACCTTCGACATCGATGCCAACGGCATCCTGAACGTCACGGCCACGGACAAGAGCACCGGCAAGGCCAGCA AGATCACCATCACCAACGACAAGGGCCGCCTGAGCAAGGAGGAGATCGAGCGCATGGTGCAGGAGGCGGAGAAGT ACAAAGCGGAGGACGAGGGTGCAGCGCGAGAGGGTGTCAGCCAAGAACGCCCTGGAGTCCTACGCCTTCAACATGA AGAGCGCCGTGGAGGATGAGGGGCTCAAGGGCAAGATCAGCGAGGCGGACAAGAAGAAGATCTGGACAAGTGTC AGCAGGTGTGTAACCCCATCATCAGCGGACTGTACCAGGGTGCCGGTGGTCCCGGGCCTGGGGGCTTCGGGGCCTC AGGGTCCCAAGGGAGGGTCTGGGTCAGGCCCTACCATTGAGGAGGTGGAT<u>TAG</u>GGGCCTTTGTTCTTTAGTATGT TTGTCTTTGAGGTGGACTGTTGGGACTCAAGGACTTTGCTGCTGTTTTCCTATGTCATTTCTGCTTCAGCTCTTT GCTGCTTCACTTCTTTGTAAAGTTAAGTTGTAACCTGATGGTAATTAGCTGGCTTCATTATTTTTTGTAGTACAAC CGATATGTTCATTAGAATTCTTTGCATTTAATGTTGATACTGTAAGGGTGTTTCGTTCCCTTTAAATGAATCAAC TGGGAATGTATGTTTTATAATTTGTTTATTTAAATATGAAAAATAAAATGTTAAACTTT

PCT/US2003/028547

2131/6881 FIGURE 1962

MAKAAAIGIDLGTTYSCVGVFQHGKVEIIANDQGNRTTPSYVAFTDTERLIGDAAKNQVALNPQNTVFDAKRLIG RKFGDPVVQSDMKHWPFQVINDGDKPKVQVSYKGETKAFYPEEISSMVLTKMKEIAEAYLGYPVTNAVITVPAYF NDSQRQATKDAGVIAGLNVLRIINEPTAAAIAYGLDRTGKGERNVLIFDLGGGTFDVSILTIDDGIFEVKATAGD THLGGEDFDNRLVNHFVEEFKRKHKKDISQNKRAVRRLRTACERAKRTLSSSTQASLEIDSLFEGIDFYTSITRA RFEELCSDLFRSTLEPVEKALRDAKLDKAQIHDLVLVGGSTRIPKVQKLLQDFFNGRDLNKSINPDEAVAYGAAV QAAILMGDKSENVQDLLLLDVAPLSLGLETAGGVMTALIKRNSTIPTKQTQIFTTYSDNQPGVLIQVYEGERAMT KDNNLLGRFELSGIPPAPRGVPQIEVTFDIDANGILNVTATDKSTGKASKITITNDKGRLSKEEIERMVQEAEKY KAEDEVQRERVSAKNALESYAFNMKSAVEDEGLKGKISEADKKKVLDKCQEVISWLDANTLAEKDEFEHKRKELE QVCNPIISGLYQGAGGPGFGGAQGPKGGSGSGSTIEEVD

PCT/US2003/028547

2132/6881 FIGURE 1963

GCTGCTGCGACAGTCCACTACCTTTTTCGAGAGTGACTCCCGTTGTCCCAAGGCTTCCCAGAGCGAACCTGTGCG GCTGCAGGCACCGGCGCGTCGAGTTTCCGGCGTCCGGAAGGACCGAGCTCTTCTCGCGGATCCAGTGTTCCGTTT $\tt CCAGCCCCAATCTCAGAGCCGAGCCGACAGAGAGCAGGGGAACCGGC<math>\underline{ATG}$ GCCAAAGCCGCGGCGATCGGCATCG ACCTGGGCACCACCTACTCCTGCGTGGGGGTGTTCCAACACGGCAAGGTGGAGATCATCGCCAACGACCAGGGCA ACCGCACCACCCCAGCTACGTGGCCTTCACGGACACCGAGCGGCTCATCGGGGGATGCGGCCAAGAACCAGGTGG CGCTGAACCCGCAGAACACCGTGTTTGACGCGAAGCGGCTGATCGGCCGCAAGTTCGGCGACCCGGTGGTGCAGT CGGACATGAAGCACTGGCCTTTCCAGGTGATCAACGACGGAGACAAGCCCAAGGTGCAGGTGAGCTACAAGGGGG ACACCAAGGCATTCTACCCCGAGGAGATCTCGTCCATGGTGCTGACCAAGATGAAGGAGATCGCCGAGGCGTACC TGGGCTACCCGGTGACCAACGCGGTGATCACCGTGCCGGCCTACTTCAACGACTCGCAGCGCCAGGCCACCAAGG ATGCGGGTGTGATCGCGGGGCTCAACGTGCTGCGGATCATCAACGAGCCCACGGCCGCCGCCATCGCCTACGGCC TGGACAGAACGGGCAAGGGGGAGCGCAACGTGCTCATCTTTGACCTGGGCGGGGGCACCTTCGACGTGTCCATCC ACAGGCTGGTGAACCACTTCGTGGAGGAGTTCAAGAGAAAACACAAGAAGGACATCAGCCAGAACAAGCGAGCCG TGAGGCGGCTGCGCACCGCCTGCGAGAGGGCCAAGAGGACCCTGTCGTCCAGCACCCAGGCCAGCCTGGAGATCG ACTCCCTGTTTGAGGGCATCGACTTCTACACGTCCATCACCAGGGCGAGGTTCGAGGAGCTGTGCTCCGACCTGT TCCGAAGCACCCTGGAGCCCGTGGAGAAGGCTCTGCGCGACGCCAAGCTGGACAAGGCCCAGATTCACGACCTGG TCCTGGTCGGGGGCTCCACCCGCATCCCCAAGGTGCAGAAGCTGCTGCAGGACTTCTTCAACGGGCGCGACCTGA CCGAGAACGTGCAGGACCTGCTGCTGGACGTGGCTCCCCTGTCGCTGGGGCTGGAGACGGCCGGAGGCGTGA TGACTGCCCTGATCAAGCGCAACTCCACCATCCCCACCAAGCAGACGCAGATCTTCACCACCTACTCCGACAACC AACCCGGGGTGCTGATCCAGGTGTACGAGGGCGAGAGGGCCATGACGAAAGACAATCTGTTGGGGCGCTTCG AGCTGAGCGGCATCCCTCCGGCCCCCAGGGGGCGTGCCCCAGATCGAGGTGACCTTCGACATCGATGCCAACGGCA TCCTGAACGTCACGGCCACGGACAAGAGCACCGGCAAGGCCAACAAGATCACCATCACCAACGACAAGGGCCGCC TGAGCAAGGAGGAGATCGAGCGCATGGTGCAGGAGGCGGAGAAGTACAAAGCGGAGGACGAGGTGCAGCGCGAGA GGGTGTCAGCCAAGAACGCCCTGGAGTCCTACGCCTTCAACATGAAGAGCGCCGTGGAGGATGAGGGGCTCAAGG GCAAGATCAGCGAGGCCGACAAGAAGAAGGTGCTGGACAAGTGTCAAGAGGTCATCTCGTGGCTGGACGCCAACA ${\tt CCACCATTGAGGAGGTAGAT} \underline{{\tt TAG}} {\tt GGGCCTTTCCAAGATTGCTGTTTTTGTTTTGGAGCTTCAAGACTTTGCATTT}$ CCTAGTATTTCTGTTTGTCAGTTCTCAATTTCCTGTGTTTGCAATGTTGAAATTTTTTGGTGAAGTACTGAACTT GCTTTTTTCCGGTTTCTACATGCAGAGATGAATTTATACTGCCATCTTACGACTATTTCTTCTTTTTAATACAC

PCT/US2003/028547

FIGURE 1964

MAKAAAIGIDLGTTYSCVGVFQHGKVEIIANDQGNRTTPSYVAFTDTERLIGDAAKNQVALNPQNTVFDAKRLIG RKFGDPVVQSDMKHWPFQVINDGDKPKVQVSYKGDTKAFYPEEISSMVLTKMKEIAEAYLGYPVTNAVITVPAYF NDSQRQATKDAGVIAGLNVLRIINEPTAAAIAYGLDRTGKGERNVLIFDLGGGTFDVSILTIDDGIFEVKATAGD THLGGEDFDNRLVNHFVEEFKRKHKKDISQNKRAVRRLRTACERAKRTLSSSTQASLEIDSLFEGIDFYTSITRA RFEELCSDLFRSTLEPVEKALRDAKLDKAQIHDLVLVGGSTRIPKVQKLLQDFFNGRDLNKSINPDEAVAYGAAV QAAILMGDKSENVQDLLLLDVAPLSLGLETAGGVMTALIKRNSTIPTKQTQIFTTYSDNQPGVLIQVYEGERAMT KDNNLLGRFELSGIPPAPRGVPQIEVTFDIDANGILNVTATDKSTGKANKITITNDKGRLSKEEIERMVQEAEKY KAEDEVQRERVSAKNALESYAFNMKSAVEDEGLKGKISEADKKKVLDKCQEVISWLDANTLAEKDEFEHKRKELE QVCNPIISGLYQGAGGPGPGGFGAQGPKGGSGSGPTIEEVD

PCT/US2003/028547

2134/6881 FIGURE 1965

PCT/US2003/028547

FIGURE 1966

 ${\tt MLFYSFFKSLVGKDVVVELKNDLSICGTLHSVDQYLNIKLTDISVTDPEKYPHMLSVKNCFIRGSVVRYVQLPAD}\\ {\tt EVDTQLLQDAARKEALQQKQ}$

PCT/US2003/028547

2136/6881 FIGURE 1967A

GTCACAAAGGGGGGAACACGTGGGCGCCGGCTGCCGGGGCGGCGATCTTAGGGAACTAGGGTCACCTGGAGAGCC CTGGGGAGGGTCCCGGATGGGGAGGACCCACCCCCGCATCTGTCTCCAGCCACCCCCGACTAGCAGGACTCCCT TTCCCCCACCCGCCTGCCGGCCCTGGAGCAGGGGCCCGGTGGGCTCTGGGTGTGGGGGGGCCACGGCTGTGGCCC AGCTGCTGTGGCCAGCAGGCCTGGGGGGCCCAGGGGGCAGCCGGGCGGCTGTCCTTGTCCAACAGTGGGTCAGTT ACGCCGACACGGAGTTAATACCAGCTGCCTGTGGAGCAACGCTGCCGGCCCTGGGACTCCGAAGCTCGGCCCAGG ACCCCAGGCTGTGCTGGGGGCCCTGGGCAGGCCCTTGGAGCAGTGGCTTCGGCTGCACACCTACT TGGCCGGGGAGGCCCCCACTCTGGCTGACCTGGCGGCTGTCACAGCCTTGCTGCTGCCTTTCCGATACGTCCTAG ACCCACCTGCCGGCCGGATCTGGAATAATGTGACTCGCTGGTTTGTCACGTGTGTCCGGCAGCCAGAATTCCGAG TCCCAAAGACAGCTGCTCAGCTCAAGAAAGAGGCAAAGAAACGGGAGAAGCTAGAGAAATTCCAACAGAAGCAGA AGATCCAACAGCAGCAGCCACCTCCAGGGGAGAAGAAACCAAAACCAGAGAAGAGGGGAGAAACGGGATCCTGGGG TCATTACCTATGACCTCCCACCCCGGGGAAAAGAAGATGTCAGTGGCCCCATGCCCGACTCCTACAGCC $\verb|CTCGGTATGTGGAGGCTGCCTGGTACCCTTGGTGGGAGCAGCAGGGCTTCTTCAAGCCAGAGTATGGGCGTCCTA|\\$ ATGTGTCAGCAGCAAA1CCCCGAGGTGTCTTCATGATGTGCATCCCACCCCCCAATGTGACAGGCTCCCTGCACC TGGGCCATGCACTCACCAACGCCATCCAGGACTCCCTGACTCGATGGCACCGCATGCGTGGGGAGACCACCCTGT GGAACCCTGGCTGTGACCATGCAGGTATTGCCACCCAGGTGGTGGTGGAGAAGAAGCTATGGCGTGAGCAGGGAC TGAGCCGGCACCAGCTGGGCCGCGAGGCCTTTCTACAGGAAGTCTGGAAGTGGAAGGAGGAGAAAGGTGACCGGA TTTACCACCAGTTGAAGAAGCTTGGCAGCTCCTTGGACTGGGATCGAGCCTGTTTCACCATGGACCCTAAACTCT CAGCAGCTGTGACAGAGGCCTTTGTCCGGCTTCACGAGGAAGGCATCATCTATCGCAGTACCCGCCTTGTTAACT GGTCCTGCACCCTCAACTCCGCCATCTCTGACATTGAGGTGGATAAGAAGGAGCTGACAGGTCGCACCCTGCTCT CCGTGCCTGGCTACAAGGAGAAGGTGGAGTTCGGGGTCCTCGTGTCCTTTGCCTATAAGGTCCAAGGCTCAGATA GCGACGAGGAGGTGGTGGCAACAACTCGGATCGAGACAATGCTGGGAGATGTGGCTGTAGCTGTGCACCCCA AAGATACCAGATACCAGCACCTGAAGGGGAAGAACGTGATCCACCCATTCCTGTCTCGGAGCCTTCCCATTGTCT TCGATGAATTTGTGGACATGGACTTTGGCACAGGTGCTGTGAAGATCACCCCCGCACATGACCAAAATGACTATG AAGTTGGGCAGCGGCACGGGCTGGAGGCCATCAGCATCATGGACTCCCGGGGGGCCCTCATCAATGTGCCTCCGC CTTTCCTGGGCCTGCCCAGGTTTGAGGCCAGGAAAGCGGTGCTGGTGGCGCTGAAGGAGCGGGGACTGTTCCGTG GCATTGAGGACAACCCCATGGTGGTGCCACTTTGCAACCGGTCGAAGGACGTGGTAGAGCCTCTGCTGCGGCCGC AGTGGTACGTTCGCTGCGGGGAGATGGCCCAGGCTGCCAGCGCCGCTGTGACTCGGGGTGACCTCCGCATCCTGC CTGAGGCCCATCAGCGCACATGGCATGCCTGGATGGACAACATCCGGGAGTGGTGCATTTCCAGGCAGCTGTGGT GGGGCCATCGCATCCCAGCCTACTTTGTCACTGTCAGTGACCCAGCGGTGCCCCCTGGGGAGGACCCTGATGGGC GGTACTGGGTGAGTGGACGCAATGAGGCGGAGGCCCGGGAGAAGGCAGCCAAGGAGTTCGGAGTGTCCCCTGACA AGATCAGTCTCCAGCAAGATGAGGATGTATTGGATACCTGGTTCTCCTCTGGCCTCTTCCCCTTATCCATTTTGG GCTGGCCCAACCAGTCAGAAGACCTGAGTGTTCTACCCCGGGACACTGCTGGAGACCGGTCATGACATCCTCT TCTTCTGGGTGGCCCGGATGGTCATGCTGGGCCTGAAGCTCACGGGCAGGCTGCCCTTTAGAGAGGTCTACCTCC ATGCCATCGTGCGAGATGCTCACGGCCGGAAGATGAGCAAGTCTCTAGGCAATGTCATCGATCCCCTGGATGTCA TCTATGGAATCTCCCTGCAGGGCCTCCACAACCAGCTGCTGAACAGCAACCTGGATCCCAGCGAGGTGGAGAAGG $\verb|CCAAAGAAGGGCAGAAAGCTGACTTCCCAGCGGGGATTCCTGAATGTGGCACCGATGCTCTCCGGTTTGGATTAT|\\$ GTGCCTACATGTCCCAGGGTCGTGACATCAACCTGGATGTGAACCGGATACTGGGTTACCGCCACTTCTGCAACA GAGGCCATGAGAGCCTGGTGGACCGCTGGATCCGCAGCCGCCTGACAGAGGCTGTGAGGCTCAGCAATCAAGGCT TCCAGGCCTACGACTTCCCGGCCGTCACCACTGCCCAGTACAGCTTCTGGCTCTATGAGCTCTGTGATGTCTACT TGGAGTGCCTGAAACCTGTACTGAATGGGGTGGACCAGGTGGCAGCTGAGTGTGCCCGCCAGACCCTGTACACTT GCCTGGACGTTGGCCTGCGGCTGCTCTCACCCTTCATGCCCTTCGTGACGGAGGAGCTGTTCCAGAGGCTGCCCC GGAGGATGCCGCAAGCTCCCCCTAGCCTCTGTGTTACCCCCTACCCGGAGCCCTCAGAGTGCTCCTGGAAGGACC CCGAGGCAGAAGCCGCCCTTGAGCTGGCGCTAAGCATCACGCGAGCCGTGCGCTCCCTGCGGGCCGACTACAACC

PCT/US2003/028547

FIGURE 1967B

PCT/US2003/028547

2138/6881 FIGURE 1968

MSTLYVSPHPDAFPSLRALIAARYGEAGEGPGWGGAHPRICLQPPPTSRTPFPPPRLPALEQGPGGLWVWGATAV ${\tt AQLLWPAGLGGPGGSRAAVLVQQWVSYADTELIPAACGATLPALGLRSSAQDPQAVLGALGRALSPLEEWLRLHT}$ YLAGEAPTLADLAAVTALLLPFRYVLDPPARRIWNNVTRWFVTCVRQPEFRAVLGEVVLYSGARPLSHQPGPEAP ALPKTAAOLKKEAKKREKLEKFOOKOKIOOOOPPPGEKKPKPEKREKRDPGVITYDLPTPPGEKKDVSGPMPDSY ${\tt SPRYVEAAWYPWWEQQGFFKPEYGRPNVSAANPRGVFMMCIPPPNVTGSLHLGHALTNAIQDSLTRWHRMRGETT}$ LWNPGCDHAGIATQVVVEKKLWREQGLSRHQLGREAFLQEVWKWKEEKGDRIYHQLKKLGSSLDWDRACFTMDPK LSAAVTEAFVRLHEEGIIYRSTRLVNWSCTLNSAISDIEVDKKELTGRTLLSVPGYKEKVEFGVLVSFAYKVQGS DSDEEVVVATTRIETMLGDVAVAVHPKDTRYQHLKGKNVIHPFLSRSLPIVFDEFVDMDFGTGAVKITPAHDQND YEVGQRHGLEAISIMDSRGALINVPPPFLGLPRFEARKAVLVALKERGLFRGIEDNPMVVPLCNRSKDVVEPLLR PQWYVRCGEMAQAASAAVTRGDLRILPEAHQRTWHAWMDNIREWCISRQLWWGHRIPAYFVTVSDPAVPPGEDPD GRYWVSGRNEAEAREKAAKEFGVSPDKISLQQDEDVLDTWFSSGLFPLSILGWPNQSEDLSVFYPGTLLETGHDI LFFWVARMVMLGLKLTGRLPFREVYLHAIVRDAHGRKMSKSLGNVIDPLDVIYGISLQGLHNQLLNSNLDPSEVE KAKEGQKADFPAGIPECGTDALRFGLCAYMSQGRDINLDVNRILGYRHFCNKLWNATKFALRGLGKGFVPSPTSQ PGGHESLVDRWIRSRLTEAVRLSNQGFQAYDFPAVTTAQYSFWLYELCDVYLECLKPVLNGVDQVAAECARQTLY TCLDVGLRLLSPFMPFVTEELFQRLPRRMPQAPPSLCVTPYPEPSECSWKDPEAEAALELALSITRAVRSLRADY NLTRIRPDCFLEVADEATGALASAVSGYVQALASAGVVAVLALGAPAPQGCAVALASDRCSIHLQLQGLVDPARE LGKLQAKRVEAQRQAQRLRERRAASGYPVKVPLEVQEADEAKLQQTEAELRKVDEAIALFQKML

PCT/US2003/028547

FIGURE 1969

GCGGCTCTCTGATCCAGCCCGGGAGAGGACCGAGCTGGAGGAGCTGGGTGTGGGGTGCGTTGGGCTGGTGGGGAG GCCTAGTTTGGGTGCAAGTAGGTCTGATTGAGCTTGTGTTGTGCTGAAGGGACAGCCCTGGGTCTAGGGGAAGA GTCCCTGAGTGTGAGACCCGCCTTCCCCGGTCCCAGCCCCTCCCAGTTCCCCAGGGACGGCCACTTCCTGGTCC $\texttt{CCGACGCAACC} \underline{\textbf{ATG}} \texttt{GCTGAAGAACAACCGCAGGTCGAATTGTTCGTGAAGGCTGGCAGTGATGGGGCCAAGATTG}$ GGAACTGCCCATTCTCCCAGAGACTGTTCATGGTACTGTGGCTCAAGGGAGTCACCTTCAATGTTACCACCGTTG ACACCAAAAGGCGGACCGAGACAGTGCAGAAGCTGTGCCCAGGGGGGGCAGCTCCCATTCCTGCTGTATGGCACTG AAGTGCACACAGACACAAGATTGAGGAATTTCTGGAGGCAGTGCTGTGCCCTCCCAGGTACCCCAAGCTGG CAGCTCTGAACCCTGAGTCCAACACAGCTGGGCTGGACATATTTGCCAAATTTTCTGCCTACATCAAGAATTCAA ACCCAGCACTCAATGACAATCTGGAGAAGGGACTCCTGAAAGCCCTGAAGGTTTTAGACAATTACTTAACATCCC CCCTCCCAGAAGAAGTGGATGAAACCAGTGCTGAAGATGAAGGTGTCTCTCAGAGGAAGTTTTTTGGATGGCAACG AGCTCACCCTGGCTGACTGCAACCTGTTGCCAAAGTTACACATAGTACAGGTGGTGTAAGAAGTACCGGGGAT TCACCATCCCGAGGCCTTCCGGGGAGTGCATCGGTACTTGAGCAATGCCTACGCCCGGGAAGAATTCGCTTCCA CTCCCTCAACCCCCTCCATTTTCTCCACAAAGGCCCTGGTGGTTTCCACATTGCTACCCAATGGACACACTCCAA TGGGGGGCCTGGGTCAGATTTTTATTGTGGGGTGGGTGAGTAGGACAACATATTTCAGTAATAAAATACAGAAT AAAAATCAAGTGTTTTTAAAAAAAA

PCT/US2003/028547

FIGURE 1970

MAEEQPQVELFVKAGSDGAKIGNCPFSQRLFMVLWLKGVTFNVTTVDTKRRTETVQKLCPGGQLPFLLYGTEVHT DTNKIEEFLEAVLCPPRYPKLAALNPESNTAGLDIFAKFSAYIKNSNPALNDNLEKGLLKALKVLDNYLTSPLPE EVDETSAEDEGVSQRKFLDGNELTLADCNLLPKLHIVQVVCKKYRGFTIPEAFRGVHRYLSNAYAREEFASTCPD DEEIELAYEQVAKALK

PCT/US2003/028547

FIGURE 1971

ATGAGCAGCTCAGAGGAGGTGTCCTGGATTTCCTGGTTCTGTGGGCTCCGTGGCAATGAATTCTTCTGTGAAGTG
GATGAAGACTACATCCAGGACAAATTTAATCTTACTGGACTCAATGAGCAGGTCCCTCACTACCGACAAGCTCTA
GACATGATCTTGGACCTGGAGCCTGATGAAGAACTGGAAGACAACCCCAACCAGAGTGACCTGATTGAGCAGGCA
GCCGAGATGCTTTATGGATTGATCCACGCCCGCTACATCCTTACCAACCGTGGCATCGCCCAGATGTTGGAAAAG
TACCAGCAAGGAGACTTTGGTTACTGTCCTCGTGTGTACTGTGAGAACCAGCCAATGCTTCCCATTGGCCTTTCA
GACATCCCAGGTGAAGCCATGGTGAAGCTCTACTGCCCCAAGTGCATGGTGTACCACCCAAGTCATCAAGA
CACCATCACACGGATGGCGCCTACTTCGGCACTGGTTTCCCTCACATGCTCTTCATGGTGCATCCCGAGTACCGG
CCCAAGAGACCTGCCAACCAGTTTGTGCCCAGGCTCTACGGTTTCAAGATCCATGCGATGGCCTACCAGCTGCAG
CTCCAAGCCGCCAGCAACTTCAAGAGCCCAGTCAAGACGATTCGC<u>TGA</u>

PCT/US2003/028547

2142/6881 FIGURE 1972

 ${\tt MSSSEEVSWISWFCGLRGNEFFCEVDEDYIQDKFNLTGLNEQVPHYRQALDMILDLEPDEELEDNPNQSDLIEQAAEMLYGLIHARYILTNRGIAQMLEKYQQGDFGYCPRVYCENQPMLPIGLSDIPGEAMVKLYCPKCMDVYTPKSSRHHHTDGAYFGTGFPHMLFMVHPEYRPKRPANQFVPRLYGFKIHAMAYQLQLQAASNFKSPVKTIR}$

PCT/US2003/028547

2143/6881 FIGURE 1973A

TAGTGCGACGCACGCAGGCGTAGTACGGTCCCCCGGGCGACAGCGGTGGCGGCTCCTCGGGGTGCTCGGCTCCCT CCCACCTAGGCCGGCCCGGCCCGACTCGCCCTCAGAAACTCACTGTTTGGGGCTGCGGACTTTCTCGTCGTGCC CCACAAAAGTAAAGCTTGGGGACCTGGGGGGAGCCGGAAGTATCGCTTCGAGATCCCCAAATACTATCGGGGAAA $\tt CGGAAGTGGCCGTCGGTGGCAGGTTTGGGGGAGACCGGAAGTGACGAGACCTGTCGGCC\underline{ATG}GAGCCTAATGATA$ GTACCAGTACCGCTGTGGAGGAGCCTGACAGCTTGGAGGTGTTGGTGAAGACCTTGGACTCTCAAACTCGTACCT TTATTGTGGGGGCCCAGATGAATGTAAAAGAGTTTAAGGAGCACATTGCTGCCTCTGTCAGCATCCCATCTGAAA AACAACGGCTCATTTACCAGGGACGAGTTCTGCAAGATGATAAGAAGCTTCAGGAATACAATGTTGGGGGAAAGG TTATCCACCTGGTGGAACGGGCTCCTCAGACTCACCTCCCTTCTGGGGCATCTTCTGGGACGGGTCTGCCT CAGCCACTCATGGTGGGGGATCCCCCCTGGTACTCGGGGGCCTGGGGCCTCTGTTCATGACCGGAATGCCAACA GCTATGTCATGGTTGGAACCTTCAATCTTCCTAGTGACGGCTCTGCTGGATGTTCACATCAACATGGAACAGG CCCCGATTCAGAGTGAGCCCCGGGTACGGCTGGTGATGGCTCAGCACATGATCAGGGGATATACAGACCTTACTAT CCCGGATGGAGACTCTCCCCTACCTTCAGTGTCGAGGAGGGCCCCAACCGCAGCACAGTCAGCCGCCCCCGCAGC CACCGGCTGTGACCCCGGAGCCAGTAGCCTTGAGCTCTCAAACATCAGAACCAGTTGAAAGTGAAGCACCTCCCC GGGAGCCCATGGAGGCAGAAGAAGTGGAGGAGCGTGCCCCAGCCCAGAACCCGGAGCTCACTCCTGGCCCAGCCC CAGCGGGCCCAACACCTGCCCGGAAACAATGCACCCAACCATCCTTCCCCTGCGGAGTATGTCGAGGTGCTCC AGGAGCTACAGCGGCTGGAGAGTCGCCTCCAGCCCTTCTTGCAGCGCTACTACGAGGTTCTGGGTGCTGCCA CCACGGACTACAATAACAATCACGAGGGCCGGGAGGAGGAGCATCAGCGGTTGATCAACTTGGTAGGGGAGAGCCTGC GACTGCTGGGCAACACCTTTGTTGCACTGTCTGACCTGCGCTGCAATCTGGCCTGCACGCCCCACGACACCTGC TGGGAACCACTGTGACCATGACAGGAAATGGGACTCGGCCCCCCCAACTCCCAATGCAGAGGCACCTCCCCCTG GTCCTGGGCAGGCCTCATCCGTGGCTCCGTCTTCTACCAATGTCGAGTCCTCAGCTGAGGGGGGCTCCCCCGCCAG GTCCAGCTCCCCGCCAGCCACCAGCCACCGAGGGTCATCCGGATTTCCCACCAGAGTGTGGAACCCGTGGTCA TGATGCACATGAACATTCAAGATTCTGGCACACAGCCTGGTGGTGTTCCĢAGTGCTCCCACTGGCCCCCTGGGAC CCCCTGGTCATGGCCAAACCCTGGGACAGCAGGTGCCAGGCTTCCCAACAGCTCCAACCCGGGTGGTGATTGCCC GGCCCACTCCTCCACAGGCTCGGCCTTCCCATCCTGGAGGGCCCCCAGTCTCTGGGACACTGCAGGGCGCCGGTC TGGGTACCAATGCCTCGTTGGCCCAGATGGTGAGCGGCCTTGTGGGGCAGCTTCTTATGCAGCCAGTCCTTGTGG CTCAGGGGACCCCAGGTATGGCTCCACCGCCAGCCCTGCCACTGCTTCTGCCAGTGCTGGCACCACCAACACAC CTACCACAGCTGGCCCGCTCCTGGGGGGCCTGCCCAGCCTCCACCCCTCAACCCTCCATGGCTGATCTTC AGTTCTCTCAGCTTCTGGGGAACCTGCTAGGGCCTGCAGGGCCAGGGGCTGGAGGGCCTGGTGTGGCTTCTCCCA CCCCTCCACCCCCCCCCCCCCCCCCCCCCCCCACCAGAGCAGCCAGACCATGCCCCCACCAGGCTCCC CTTCTGGTGGCGCAGGGAGTCCTGGAGGCCTGGGTCTTGAGAGCCTGTCACCGGAGTTTTTTACCTCAGTGGTGC AGGGTGTGCTCAGCTCCCTGGGGCTCCCTGGGGGCTCGGCCTGGCAGCAGTGAAAGTATTGCTGCCTTCATAC AACGCCTCAGTGGATCCAGCAACATCTTTGAGCCTGGAGCTGATGGGGCCCTTGGATTCTTTGGGGCCCTTGCTTT CTCTTCTGTGCCAGAACTTCTCTATGGTGGACGTAGTGATGCTTCTCCATGGGCATTTCCAGCCACTACAACGGC TCCAGCCCCAGCTGCGATCCTTCTCCACCAGCACTACCTGGGTGGTCAGGAGCCCACACCCAGTAACATCCGGA TGGCAACCCACACTTGATCACGGGGCTAGAAGAGTATGTGCGGGAGAGTTTTTCCTTGGTGCAGGTTCAGCCAG GTGTGGACATCATCCGGACAAACCTGGAATTTCTCCAAGAGCAGTTTAATAGCATTGCTGCGCATGTGCTGCATT GCACAGATAGTGGATTTGGGGCCCGGTTGCTGGAGTTGTGTAACCAAGGCCTGTTTGAATGCCTGGCCCTAAACC TGCACTGCTTGGGGGGGACAGCAGATGGAGCTTGCTGCTGTTATCAATGGCCGAATTCGTCGTATGTCTCGTGGGG TGAATCCCTCCTTGGTGAGCTGGCTGACCACTATGATGGGACTGAGGCTTCAGGTGGTACTGGAGCACATGCCTG TAGGCCCTGATGCCATTCTCAGATACGTTCGCAGGGTTGGTGATCCCCCCCAGCCACTTCCTGAGGAGCCAATGG AAGTTCAGGGAGCAGAAAGAGCTTCCCCTGAGCCTCAGCGGGAGAATGCTTCCCCAGCCCCTGGAACAACAGCAG AAGAGGCCATGTCCCGAGGTCCACCTCCTGCTCCTGAGGGGGGCTCCCGGGATGAACAGGATGGAGCTTCAGCTG AGACAGAACCTTGGGCAGCTGCAGTCCCCCAGAATGGGTCCCTATTATCCAGCAGGACATTCAGAGCCAGCGGA GTGAGGGCCCCCAGCTGCTTCTCTCAGAGGCTGTGAGCCGGGCAGCTAAGGCAGCCGGAGCTCGGCCCCTGACGA GCCCGAGAGCCTGAGCCGGGACCTGGAGGCACCAGAGGTTCAGGAGAGCTACAGGCAGCAGCTCCGGTCTGATA

PCT/US2003/028547

FIGURE 1973B

 ${\tt TACAAAAACGACTGCAGGAAGACCCCAACTACAGTCCCCAGCGCGTTCCCCAATGCCCAGCGGGCCTTTGCTGATGAGCCCTTTGCTGATGAGACCCTTTGCTCATCAGGGGACCGTTTCCCCCCTCTTCCTCACAGTATTTAAGAAATAAAAGTCGGATTTTCTGGC}$

PCT/US2003/028547

FIGURE 1974

MEPNDSTSTAVEEPDSLEVLVKTLDSQTRTFIVGAQMNVKEFKEHIAASVSIPSEKQRLIYQGRVLQDDKKLQEY ${\tt NVGGKVIHLVERAPPQTHLPSGASSGTGSASATHGGGSPPGTRGPGASVHDRNANSYVMVGTFNLPSDGSAVDVH}$ INMEQAPIQSEPRVRLVMAQHMIRDIQTLLSRMETLPYLQCRGGPQPQHSQPPPQPPAVTPEPVALSSQTSEPVE SEAPPREPMEAEEVEERAPAQNPELTPGPAPAGPTPAPETNAPNHPSPAEYVEVLQELQRLESRLQPFLQRYYEV LGAAATTDYNNNHEGREEDQRLINLVGESLRLLGNTFVALSDLRCNLACTPPRHLHVVRPMSHYTTPMVLQQAAI PIQINVGTTVTMTGNGTRPPPTPNAEAPPPGPGQASSVAPSSTNVESSAEGAPPPGPAPPPATSHPRVIRISHQS ${\tt VEPVVMMHMNIQDSGTQPGGVPSAPTGPLGPPGHGQTLGQQVPGFPTAPTRVVIARPTPPQARPSHPGGPPVSGT}$ ${\tt LQGAGLGTNASLAQMVSGLVGQLLMQPVLVAQGTPGMAPPPAPATASASAGTTNTATTAGPAPGGPAQPPPTPQP}$ ${\tt PPPGSPSGGAGSPGGLGLESLSPEFFTSVVQGVLSSLLGSLGARAGSSESIAAFIQRLSGSSNIFEPGADGALGF}$ ${\tt FGALLSLLCQNFSMVDVVMLLHGHFQPLQRLQPQLRSFFHQHYLGGQEPTPSNIRMATHTLITGLEEYVRESFSL}$ $\tt VQVQPGVDIIRINLEFLQEQFNSIAAHVLHCTDSGFGARLLELCNQGLFECLALNLHCLGGQQMELAAVINGRIR$ ${\tt RMSRGVNPSLVSWLTTMMGLRLQVVLEHMPVGPDAILRYVRRVGDPPQPLPEEPMEVQGAERASPEPQRENASPA}$ PGTTAEEAMSRGPPPAPEGGSRDEQDGASAETEPWAAAVPPEWVPIIQQDIQSQRKVKPQPPLSDAYLSGMPAKR ${\tt RKTMQGEGPQLLLSEAVSRAAKAAGARPLTSPESLSRDLEAPEVQESYRQQLRSDIQKRLQEDPNYSPQRFPNAQ}$ RAFADDP

PCT/US2003/028547

FIGURE 1975A

TAGTGCGACGCACGCAGGCGTAGTACGGTCCCCCGGGCGACAGCGGTGGCGGCTCCTCGGGGGTGCTCGGCTCCCT CCACAAAAGTAAAGCTTGGGGACCTGGGGGGGGCCGGAAGTATCGCTTCGAGATCCCCAAATACTATCGGGGAAA ${\tt CGGAAGTGGCCGTCGGTGGCAGGTTTGGGGGGAGACCGGAAGTGACGAGACCTGTCGGCC}$ GTACCAGTACCGCTGTGGAGGAGCCTGACAGCTTGGAGGTGTTGGTGAAGACCTTGGACTCTCAAACTCGTACCT TTATTGTGGGGGCCCAGATGAATGTAAAAGAGTTTAAGGAGCACATTGCTGCCTCTGTCAGCATCCCATCTGAAA AACAACGGCTCATTTACCAGGGACGAGTTCTGCAAGATGATAAGAAGCTTCAGGAATACAATGTTGGGGGAAAGG TTATCCACCTGGTGGAACGGGCTCCTCCAGACTCACCTCCCTTCTGGGGCATCTTCTGGGACGGGGTCTGCCT CAGCCACTCATGGTGGGGGATCCCCCCTGGTACTCGGGGGCCTGGGGCCTCTGTTCATGACCGGAATGCCAACA GCTATGTCATGGTTGGAACCTTCAATCTTCCTAGTGACGGCTCTGCTGTGGATGTTCACATCAACATGGAACAGG CCCCGATTCAGAGTGAGCCCCGGGTACGGCTGGTGATGGCTCAGCACATGATCAGGGGATATACAGACCTTACTAT CCCGGATGGAGTGTCGAGGAGGGCCCCAACCGCAGCACAGTCAGCCGCCCCCGCAGCCACCGGCTGTGACCCCGG AGCCAGTAGCCTTGAGCTCTCAAACATCAGAACCAGTTGAAAGTGAAGCACCTCCCCGGGAGCCCATGGAGGCAG AAGAAGTGGAGGAGCGTGCCCCAGCCCAGAACCCGGAGCTCACTCCTGGCCCAGCCCCAGCGGGCCCAACACCTG CCCCGGAAACAATGCACCCAACCATCCTTCCCCTGCGGAGTATGTCGAGGTGCTCCAGGAGCTACAGCGGCTGG AGAGTCGCCTCCAGCCCTTCTTGCAGCGCTACTACGAGGTTCTGGGTGCTGCCGCCACCACGGACTACAATAACA ATCACGAGGGCCGGGAGGAGGATCAGCGGTTGATCAACTTGGTAGGGGAGAGCCTGCGACTGCTGGGCAACACCT TTGTTGCACTGTCTGACCTGCGCTGCAATCTGGCCTGCACGCCCCCACGACACCTGCATGTGGTCCGGCCTATGT CTCACTACACCACCCCATGGTGCTCCAGCAGGCAGCCATTCCCATACAGATCAATGTGGGAACCACTGTGACCA TGACAGGAAATGGGACTCGGCCCCCCAACTCCCAATGCAGAGGCACCTCCCCTGGTCCTGGGCAGGCCTCAT CCACCAGCCACCGAGGGTCATCCGGATTTCCCACCAGAGTGTGGAACCCGTGGTCATGATGCACATGAACATTC AAGATTCTGGCACACGCCTGGTGGTGTTCCGAGTGCTCCCACTGGCCCCCTGGGACCCCCTGGTCATGGCCAAA CCCTGGGACAGCAGGTGCCAGGCTTCCCAACAGCTCCAACCCGGGTGGTGATTGCCCGGCCCACTCCTCCACAGG $\tt CTCGGCCTTCCCATCCTGGAGGGCCCCCAGTCTCTGGGACACTGCAGGGCGCCGGTCTGGGTACCAATGCCTCGT$ TGGCCCAGATGGTGAGCGGCCTTGTGGGGCAGCTTCTTATGCAGCCAGTCCTTGTGGCTCAGGGGACCCCAGGTA CTCCTGGGGGGCCTGCCCACCCCACCCCTCAACCCTCCATGGCTGATCTTCAGTTCTCTCAGCTTCTGG GGAACCTGCTAGGGCCTGCAGGGCCAGGGGCTGGAGGGTCTGGTGTGGCTTCTCCCACCATCACTGTGGCGATGC CTCCTCCACCCCACCACCTGCCCCAGAGCAGCAGACCATGCCCCCACCAGGCTCCCCTTCTGGTGGCGCAGGGA GTCCTGGAGGCCTGGGTCTTGAGAGCCTGTCACCGGAGTTTTTTACCTCAGTGGTGCAGGGTGTGCTCAGCTCCC TGCTGGGCTCCCTGGGGGCTCGGCCTGCAGCAGTGAAAGTATTGCTGCCTTCATACAACGCCTCAGTGGATCCA GCAACATCTTTGAGCCTGGAGCTGATGGGGCCCTTGGATTCTTTTGGGGCCCTTGCTTTCTCTTCTGTGCCAGAACT TCTCTATGGTGGACGTAGTGATGCTTCTCCATGGGCATTTCCAGCCACTACAACGGCTCCAGCCCCAGCTGCGAT CCTTCTTCCACCAGCACTACCTGGGTGGTCAGGAGCCCACACCCAGTAACATCCGGATGGCAACCCACACATTGA TCACGGGGCTAGAAGAGTATGTGCGGGAGAGTTTTTCCTTGGTGCAGGTTCAGCCAGGTGTGGACATCATCCGGA CAAACCTGGAATTTCTCCAAGAGCAGTTTAATAGCATTGCTGCGCATGTGCTGCATTGCACAGATAGTGGATTTG GGGCCCGGTTGCTGGAGTTGTGAACCAAGGCCTGTTTGAATGCCTGGCCCTAAACCTGCACTGCTTGGGGGGAC AGCAGATGGAGCTTGCTGCTGTTATCAATGGCCGAATTCGTCGTATGTCTCGTGGGGTGAATCCCTCCTTGGTGA GCTGGCTGACCACTATGATGGGACTGAGGCTTCAGGTGGTACTGGAGCACATGCCTGTAGGCCCTGATGCCATTC TCAGATACGTTCGCAGGGTTGGTGATCCCCCCCAGCCACTTCCTGAGGAGCCAATGGAAGTTCAGGGAGCAGAAA GAGCTTCCCCTGAGCCTCAGCGGGAGAATGCTTCCCCAGCCCCTGGAACAACAGCAGAAGAGGCCATGTCCCGAG GTCCACCTCCTGCTCCTGAGGGGGGCTCCCGGGATGAACAGGATGGAGCTTCAGCTGAGACAGAACCTTGGGCAG CTGCAGTCCCCCAGAATGGGTCCCTATTATCCAGCAGGACATTCAGAGCCAGCGGAAGGTGAAACCGCAGCCCC CTCTGAGTGATGCCTACCTCAGTGGTATGCCTGCCAAGAGACGCAAGACGATGCAGGGTGAGGGCCCCCAGCTGC TTCTCTCAGAGGCTGTGAGCCGGGCAGCTAAGGCAGCCGGAGCTCGGCCCCTGACGAGCCCCGAGAGCCTGAGCC GGGACCTGGAGGCACCAGAGGTTCAGGAGAGCTACAGGCAGCTCCGGTCTGATATACAAAAACGACTGCAGG

PCT/US2003/028547

FIGURE 1975B

PCT/US2003/028547

2148/6881 FIGURE 1976

MEPNDSTSTAVEEPDSLEVLVKTLDSQTRTFIVGAQMNVKEFKEHIAASVSIPSEKQRLIYQGRVLQDDKKLQEY
NVGGKVIHLVERAPPQTHLPSGASSGTGSASATHGGGSPPGTRGPGASVHDRNANSYVMVGTFNLPSDGSAVDVH
INMEQAPIQSEPRVRLVMAQHMIRDIQTLLSRMECRGGPQPQHSQPPPQPPAVTPEPVALSSQTSEPVESEAPPR
EPMEAEEVEERAPAQNPELTPGPAPAGPTPAPETNAPNHPSPAEYVEVLQELQRLESRLQPFLQRYYEVLGAAAT
TDYNNNHEGREEDQRLINLVGESLRLLGNTFVALSDLRCNLACTPPRHLHVVRPMSHYTTPMVLQQAAIPIQINV
GTTVTMTGNGTRPPPTPNAEAPPPGPGQASSVAPSSTNVESSAEGAPPPGPAPPPATSHPRVIRISHQSVEPVVM
MHMNIQDSGTQPGGVPSAPTGPLGPPGHGQTLGQQVPGFPTAPTRVVIARPTPPQARPSHPGGPPVSGTLQGAGL
GTNASLAQMVSGLVGQLLMQPVLVAQGTPGMAPPPAPATASASAGTTNTATTAGPAPGGPAQPPPTPQPSMADLQ
FSQLLGNLLGPAGPGAGGSGVASPTITVAMPGVPAFLQGMTDFLQATQTAPPPPPPPPPPPPPPPPPPPPPPSPSP
SGGAGSPGGLGLESLSPEFFTSVVQGVLSSLLGSLGARAGSSESIAAFIQRLSGSSNIFEPGADGALGFFGALLS
LLCQNFSMVDVVMLLHGHFQPLQRLQPQLRSFFHQHYLGGQEPTPSNIRMATHTLITGLEEYVRESFSLVQVQPG
VDIIRTNLEFLQEQFNSIAAHVLHCTDSGFGARLLELCNQGLFECLALNLHCLGGQQMELAAVINGRIRRMSRGV
NPSLVSWLTTMMGLRLQVVLEHMPVGPDAILRYVRRVGDPPQPLPEEPMEVQGAERASPEPQRENASPAPGTTAE
EAMSRGPPPAPEGGSRDEQDGASAETEPWAAAVPPEWVPIIQQDIQSQRKVKPQPPLSDAYLSGMPAKRRKTMQG
EGPQLLLSEAVSRAAKAAGARPLTSPESLSRDLEAPEVQESYRQQLRSDIQKRLQEDPNYSPQRFPNAQRAFADD

WO 2004/030615 PCT/US2003/028547

2149/6881 FIGURE 1977A

TAGTGCGACGCACGCAGGCGTAGTACGGTCCCCCGGGCGACAGCGGTGGCGGCTCCTCGGGGTGCTCGGCTCCCT CCCACCTAGGCCGGCCCGGCCCGACTCGCCCTCAGAAACTCACTGTTTGGGGCTGCGGACTTTCTCGTCGTGCC CCACAAAAGTAAAGCTTGGGGACCTGGGGGGGGCCGGAAGTATCGCTTCGAGATCCCCAAATACTATCGGGGAAA CTGACAGCTTGGAGGTGTTGGTGAAGACCTTGGACTCTCAAACTCGTACCTTTATTGTGGGGGCCCAGATGAATG TAAAAGAGTTTAAGGAGCACATTGCTGCCTCTGTCAGCATCCCATCTGAAAAACAACGGCTCATTTACCAGGGAC GAGTTCTGCAAGATGATAAGAAGCTTCAGGAATACAATGTTGGGGGAAAGGTTATCCACCTGGTGGAACGGGCTC CTCCTCAGACTCACCTCCCTTCTGGGGCATCTTCTGGGACGGGGTCTGCCTCAGCCACTCATGGTGGGGGATCCC CCCCTGGTACTCGGGGGCCTGGGGCCTCTGTTCATGACCGGAATGCCAACAGCTATGTCATGGTTGGAACCTTCA ATCTTCCTAGTGACGGCTCTGCTGGGATGTTCACATCAACATGGAACAGGCCCCGATTCAGAGTGAGCCCCGGG TACGGCTGGTGATGGCTCAGCACATGATCAGGGATATACAGACCTTACTATCCCGGATGGAGTGTCGAGGAGGGC CCCAACCGCAGCACAGTCAGCCGCCCCCGCAGCCACCGGCTGTGACCCCGGAGCCAGTAGCCTTGAGCTCTCAAA CATCAGAACCAGTTGAAAGTGAAGCACCTCCCCGGGAGCCCATGGAGGCAGAAGAAGTGGAGGAGCGTGCCCCAG CCCAGAACCCGGAGCTCACTCCTGGCCCAGCCCCAGCGGCCCAACACCTGCCCCGGAAACAAATGCACCCAACC ATCCTTCCCCTGCGGAGTATGTCGAGGTGCTCCAGGAGCTACAGCGGCTGGAGAGTCGCCTCCAGCCCTTCTTGC AGCGCTACTACGAGGTTCTGGGTGCTGCCACCACGGACTACAATAACAATCACGAGGGCCGGGAGGAGGATC AGCGGTTGATCAACTTGGTAGGGGAGAGCCTGCGACTGCTGGGCAACACCTTTGTTGCACTGTCTGACCTGCGCT GCAATCTGGCCTGCACGCCCCCACGACACCTGCATGTGGTCCGGCCTATGTCTCACTACACCACCCCCATGGTGC TCCAGCAGCCAGCCATTCCCATACAGATCAATGTGGGAACCACTGTGACCATGACAGGAAATGGGACTCGGCCCC CCCCAACTCCCAATGCAGAGGCACCTCCCCCTGGTCCTGGGCAGGCCTCATCCGTGGCTCCGTCTTCTACCAATG GGATTTCCCACCAGAGTGTGGAACCCGTGGTCATGATGCACATGAACATTCAAGATTCTGGCACACAGCCTGGTG GTGTTCCGAGTGCTCCCACTGGCCCCCTGGGACCCCCTGGTCATGGCCAAACCCTGGGACAGCAGGTGCCAGGCT TCCCAACAGCTCCAACCCGGGTGGTGATTGCCCGGCCCACTCCTCCACAGGCTCGGCCTTCCCATCCTGGAGGGC CCCCAGTCTCTGGGACACTGCAGGGCGCCGGTCTGGGTACCAATGCCTCGTTGGCCCAGATGGTGAGCGGCCTTG TGGGGCAGCTTCTTATGCAGCCAGTCCTTGTGGCTCAGGGGACCCCAGGTATGGCTCCACCGCCAGCCCCTGCCA CTGCTTCTGCCAGTGCTGGCACCACCAACACAGCTACCACAGCTGGCCCGCTCCTGGGGGGGCCTGCCCAGCCTC CACCCACCCTCAACCCTCCATGGCTGATCTTCAGTTCTCTCAGCTTCTGGGGAACCTGCTAGGGCCTGCAGGGC CAGGGGCTGGAGGGTCTGGTGTGGCTTCTCCCACCATCACTGTGGCGATGCCTGGTGTCCCTGCCTTTCTCCAAG CAGAGCAGCAGACCATGCCCCCACCAGGCTCCCCTTCTGGTGGCGCAGGGAGTCCTGGAGGCCTGGGTCTTGAGA GCCTGTCACCGGAGTTTTTTACCTCAGTGGTGCAGGGTGTCCTCAGCTCCCTGGGGGCTCCCTGGGGGCTCGGG CTGGCAGCAGTGAAAGTATTGCTGCCTTCATACAACGCCTCAGTGGATCCAGCAACATCTTTGAGCCTGGAGCTG ATGGGGCCCTTGGATTCTTTGGGGCCTTGCTTTCTCTTCTGTGCCAGAACTTCTCTATGGTGGACGTAGTGATGC TTCTCCATGGGCATTTCCAGCCACTACAACGGCTCCAGCCCCAGCTGCGATCCTTCTTCCACCAGCACTACCTGG GTGGTCAGGAGCCCACACCCAGTAACATCCGGATGGCAACCCACACTTGATCACGGGGCTAGAAGAGTATGTGC GGGAGAGTTTTTCCTTGGTGCAGGTTCAGCCAGGTGTGGACATCATCCGGACAAACCTGGAATTTCTCCAAGAGC AGTTTAATAGCATTGCTGCGCATGTGCTGCATTGCACAGATAGTGGATTTGGGGCCCGGTTGCTGGAGTTGTGTA ACCAAGGCCTGTTTGAATGCCTGGCCCTAAACCTGCACTGCTTGGGGGGGACAGCAGATGGAGCTTGCTGCTGTTA TGAGGCTTCAGGTGGTACTGGAGCACATGCCTGTAGGCCCTGATGCCATTCTCAGATACGTTCGCAGGGTTGGTG ATCCCCCCAGCCACTTCCTGAGGAGCCAATGGAAGTTCAGGGAGCAGAAAGAGCTTCCCCTGAGCCTCAGCGGG AGAATGCTTCCCCAGCCCTGGAACAACAGCAGAAGAGGGCCATGTCCCGAGGTCCACCTCCTGCTCCTGAGGGGG GCTCCCGGGATGAACAGGATGGAGCTTCAGCTGAGACAGAACCTTGGGCAGCTGCAGTCCCCCAGAATGGGTCC CTATTATCCAGCAGGACATTCAGAGCCAGCGGAAGGTGAAACCGCAGCCCCCTCTGAGTGATGCCTACCTCAGTG GTATGCCTGCCAAGAGGCCAAGACGATGCAGGGTGAGGGCCCCCAGCTGCTTCTCTCAGAGGCTGTGAGCCGGG CAGCTAAGGCAGCCGGAGCTCGGCCCCTGACGAGCCCCGAGAGCCTGAGCCGGGACCTGGAGGCACCAGAGGTTC AGGAGAGCTACAGGCAGCTCCGGTCTGATATACAAAAACGACTGCAGGAAGACCCCAACTACAGTCCCCAGC

PCT/US2003/028547

2150/6881 FIGURE 1977B

PCT/US2003/028547

FIGURE 1978

MEPNDSTSTAVEEPDSLEVLVKTLDSQTRTFIVGAQMNVKEFKEHIAASVSIPSEKQRLIYQGRVLQDDKKLQEY
NVGGKVIHLVERAPPQTHLPSGASSGTGSASATHGGSPPGTRGPGASVHDRNANSYVMVGTFNLPSDGSAVDVH
INMEQAPIQSEPRVRLVMAQHMIRDIQTLLSRMECRGGPQPQHSQPPPQPPAVTPEPVALSSQTSEPVESEAPPR
EPMEAEEVEERAPAQNPELTPGPAPAGPTPAPETNAPNHPSPAEYVEVLQELQRLESRLQPFLQRYYEVLGAAAT
TDYNNNHEGREEDQRLINLVGESLRLLGNTFVALSDLRCNLACTPPRHLHVVRPMSHYTTPMVLQQAAIPIQINV
GTTVTMTGNGTRPPPTPNAEAPPPGPGQASSVAPSSTNVESSAEGAPPPGPAPPPATSHPRVIRISHQSVEPVVM
MHMNIQDSGTQPGGVPSAPTGPLGPPGHGQTLGQQVPGFPTAPTRVVIARPTPPQARPSHPGGPPVSGTLQGAGL
GTNASLAQMVSGLVGQLLMQPVLVAQGTPGMAPPPAPATASASAGTTNTATTAGPAPGGPAQPPPTPQPSMADLQ
FSQLLGNLLGPAGPGAGGSGVASPTITVAMPGVPAFLQGMTDFLQATQTAPPPPPPPPPPPPPPPPPPPPPSPSP
SGGAGSPGGLGLESLSPEFFTSVVQGVLSSLLGSLGARAGSSESIAAFIQRLSGSSNIFEPGADGALGFFGALLS
LLCQNFSMVDVVMLLHGHFQPLQRLQPQLRSFFHQHYLGGQEPTPSNIRMATHTLITGLEEYVRESFSLVQVQPG
VDIIRTNLEFLQEQFNSIAAHVLHCTDSGFGARLLELCNQGLFECLALNLHCLGGQQMELAAVINGRIRRMSRGV
NPSLVSWLTTMMGLRLQVVLEHMPVGPDAILRYVRRVGDPPQPLPEEPMEVQGAERASPEPQRENASPAPGTTAE
EAMSRGPPPAPEGGSRDEQDGASAETEPWAAAVPPEWVPIIQQDIQSQRKVKPQPPLSDAYLSGMPAKRRKTMQG
EGPQLLLSEAVSRAAKAAGARPLTSPESLSRDLEAPEVQESYRQQLRSDIQKRLQEDPNYSPQRFPNAQRAFADD

PCT/US2003/028547

FIGURE 1979A

CCCTAGGCCCGGGTCCCGGATCCCCGCGCACCCGGCCAGGCTCTGGCACGTTTTGGGGGAGGTGCCTGCAGGACC CAACATACTCAATGAGCTTCCAGCGCAATGTCCGATCGCTCGGGGCCGACTGCCAAGGGAAAGGATGGAAAGAAG TATTCCTCGCTCAACCTGTTTGATACGTATAAGGGCAAGTCCTTAGAGATCCAGAAACCCGCTGTTGCCCCTCGC CATGGCCTGCAGAGTCTCGGGAAAGTTGCCATTGCCCGGCGTATGCCACCTCCAGCCAACCTTCCAAGCCTGAAA CAGTCCGACCCCAAGAGTTCCGATGCCTCAACCGCTCAGCCGCCGGAATCGCAGCCACTGCCGGCTTCACAGACG CCTGCCTCCAACCAGCCGAAACGACCCCCAGCAGCCCCCGAGAACACTCCTTTGGTTCCAAGCGGGGTAAAGTCC TGGGCACAAGCCAGCGTCACCCATGGAGCACATGGAGATGGTGGAAGGGCATCAAGCCTACTGTCACGATTCTCT CGAGAGGAATTTCCGACCCTGCAGGCGGCTGGCGACCAGGACAAGGCTGCCAAGGAAAGGGAGTCTGCCGAACAG TCGTCTGGGCCCGGACCAAGCCTCCGCCCCAAAATTCTACAACTTGGAGGGACGGAGGTGGGCGTGGCCCTGAT GAGCTGGAGGGCCCGGACTCCAAACTTCATCATGGTCATGATCCCCGGGGTGGGCTACAGCCTTCAGGCCCACCC CAGTTCCCTCCCTACCGCGGAATGATGCCGCCTTTCATGTATCCCCCATATCTCCCGTTCCCTCCGCCCTATGGA CCCCAGGGGCCTTACCGATACCCCACTCCTGATGGGCCCAGCCGTTTTCCCCGTGTGGCGGGCCCCCGAGGCTCA GGGCCACCAATGCGCTTAGTAGAGCCTGTGGGTCGTCCCTCTATTCTCAAAGAGGATAATCTCAAAGAGTTTGAT CAGTTGGATCAGGAGAATGATGATGGTTGGGCAGGGGCCCATGAAGAGGTTGACTACACTGAAAAGCTCAAGTTC GAGGAACGGCCCCTGAAGCAGATGGCAAAAAGGGCAACTCCCCCAACAGCGAACCGCCCACTCCTAAGACGGCC TGGGCAGAAACCTCTCGGCCTCCAGAGACAGAGCCGGGACCTCCTGCCCCAAAGCCTCCCCTACCCCCTGGGGAC TACCCAGATCGTGGGGGTCCTCCCTGCAAGCCCCCAGCACCTGAAGATGAGGATGAGGCATGGCGCAGCGACGA AAGCAGTCGTCATCTGAGATTTCCCTGGCAGTGGAGCGGGCCCGGCGACGGCGAGAAGAAGAGGAGCGGCGCATG CAAGAAGAGGCCCGGGCAGCCTGTGCTGAGAAGCTCAAGCGACTCGATGAAAAGTTTGGGGCACCTGACAAGCGG CTCAAAGCAGAGCCTGCTGCCCCACCTGCTGCCCCTTCTACCCCAGCTCCACCACCTGCAGTCCCTAAAGAACTC CCTGCCCAATCTACTCCTACTCCAGGTGTGGCTGCGGCTCCCACTCTGGTGAGTGGTGGTGGCAGTACCAGTAGC ACCAGCAGTGGCAGCTTCGAAGCCAGCCCAGTGGAACCACACTGCCCTCAAAAGAGGGTCCTGAACCACCAGAA GAGGTTCCTCCTCCTACCACCCCCAGTTCCAAAGGTGGAACCCAAGGGTGATGGGATTGGTCCCACCCGCCAG CAGCTCCTGAAGCAGCAGCAGCACCAGTGGCAGCAGCATCAACAGGGCTCTGCCCCTCCTACCCCAGTGCCC CCATCACCACCACAGCCTGTGACCCTGGGGGCTGTGCCAGCTCCACAGGCTCCACCCCCGCCCCCAAGGCCCTG TATGTGGACCCCGGCTCCTCCAGGGTCGTCCCCTCTAGACTTCTACCCTCCTGGTGTGCATCCCTCTGGCCTA GTTCCCCGAGAGCGTTCAGACAGTGGGGGCTCAAGCTCAGAGCCATTTGACCGTCATGCACCTGCTATGTTACGG GAACGGGGCACTCCACCGGTGGATCCAAAGTTGGCCTGGGTAGGAGATGTCTTCACCGCCACACCCGCTGAACCC CGCCCACTTACCTCACCTCTGCGCCAGGCTGCGGATGAGGATGACAAGGGGGATGAGGAGCGAGACTCCTCCAGTA CCTCCCCACCACCTATCTGGCCAGTTATCCAGGCTTTCCTGAGAATGGAGCCCCTGGGCCCCCAATCTCTCGC TTTCCTCTGGAGGAACCAGGGCCCCGTCCACTCCCCTGGCCCCAGGCAGTGATGAAGTGGCCAAGATACAAACT CCACCACCAAGAAGAGCCCCCTAAGGAGGAGACTGCACAGCTGACGGGGCCAGAAGCAGGCCGAAAGCCTGCC CGCGGAGTCGGGAGTGGAGGCCAGGGCCCCCACCACCACGCAGAGAGTCGCACAGAGACCCGCTGGGGCCCT CGTCCAGGGAGCAGTCGTCGTGGAATCCCTCCAGAGGAGCCAGGGGCCCCACCCCGCCGGGCTGGGCCTATAAAG AAACCTCCACCACCTACAAAAGTAGAAGAGCTGCCTCCCAAGCCCCTCGAACAGGGGGGATGAAACCCCCAAACCC CCAAAGCCAGACCCACTCAAGATAACCAAGGGGAAGCTAGGGGGCCCCAAGGAGACCCCAACCCAATGGAAATCTT TCCCCTGCCCCAAGGCTTCGGAGGGACTATTCGTATGAAAGAGTGGGTCCTACCTCTTGCCGGGGTCGGGGCCGA GGCGAGTATTTTGCCAGAGGGAGGGGTTTTCGGGGGACCTATGGGGGACGAGGCGGGGAGCCCGAAGCCGGGAA TTCCGCAGTTACCGAGAGTTTCGAGGAGATGATGGGCGTGGAGGTGGGACAGGGGGGACCAAACCACCCTCCTGCT CCCCGAGGCCGCACTGCCAGCGAGACACGGAGCGAGGGTTCAGAGTATGAGGAAATCCCCAAGCGGCGCCGGCAG CGGGGCTCAGAAACAGGCAGCGAGACCCATGAGAGTGATCTGGCTCCTTCAGACAAGGAGGCTCCCACACCCAAG GAGGGAACACTCACCCAGGTCCCTCTCGCTCCCCCACCACCAGGAGCCCCACCTTCACCAGCCCCAGCCCGCTTC ACTGCCCGGGGTGGCCAGTCTTCACTCCCAGAGGGGTGCCATCTCGCCGGGGCCGAGGAGGAGGAGGCCCCCT

PCT/US2003/028547

2153/6881 FIGURE 1979B

 $\verb|CCTCAAGTTTGCCCAGGCTGGAGCCCTCCAGCCAAGTCTCTGGCTCCCAAGAAACCTCCCACAGGCCCTTTGCCA|\\$ CCAAGTAAGGAGCCTTTGAAAGAGAAGTTGATCCCAGGGCCTCTGTCCCCTGTGGCGCGCGGAGGCAGCAATGGA ${\tt GGTAGCAATGTGGGCATGGAAGATGGGGAGCGACCCCGAAGGAGGCGACATGGGAGGGCTCAGCAGCAGGATAAA}$ $\verb|CTTCCAGCCTCCGCTCCTGCACCTGAGGAGGCCCTCACAACAGTCACAGTGGCCCCAGCACCTCGCCGGGCAGCT|\\$ GCCAAGTCTCCTGATCTGTCAAACCAGAACTCAGACCAAGCCAATGAGGAATGGGAGACTGCATCAGAGAGCAGT GACTTCACCAGTGAGCGCCGAGGGGACAAAGAGGCACCCCACCAGTACTGCTGACACCCAAGGCTGTGGGAACT CCTGGGGGAGGTGGAGCCGTACCAGGTATTTCAGCCATGTCCCGCGGAGATCTGAGCCAGAGAGCCAAG GATTTGAGTAAACGGAGCTTCTCAAGTCAGCGGCCAGGCATGGAACGGCAGAATCGGCGCCCTGGCCCAGGGGGC GACAAGAGGAGCTGGCCCTCTCCCAAGAACCGAAGTCGTCCTCCAGAGGAGCGTCCCCCGGGGCTTCCCCTGCCT CCCCACCTCCAGCAGTTCTGCTGTCTTCCGCCTGGACCAAGTTATCCACAGCAACCCTGCTGGCATCCAACAG GCTCTGGCCCAGCTTAGTAGCCGTCAAGGGAGTGTAACTGCACCAGGGGGTCATCCAAGGCACAAGCCTGGGCCT CCCCAAGCCCCTCAGGGCCCCTCTCCTAGGCCCCCAACCCGATACGAGGCCCCAGAGGGTCAACAGCGGCCTCAGT AGTCCCTTTCCCCCTAAACGTCGGGAGCGGCCTCCCAGAAAACCAGAGCTGCTACAGGAGGAATCTTTGCCACCT CCTCATAGCTCTGGATTCTTGGGCTCTAAGCCTGAGGGCCCAGGCCCTCAGGCAGAGTCCAGAGATACAGGCACA GAGGCCCTGACCCCTCACATCTGGAACCGTTTACATACTGCCACTAGCCGAAAGAGTTACCGGCCCAGCTCCATG GACCTGAGTGGGGATTCTCAGGTGTCATCAGGTCCCTGCAGCCGAAGTTCCCCTGATGGAGGACTCAAGGGG GCAGCAGAGGGACCCCCAAGAGGCCTGGAGGCTCCTCACCCCTGAATGCTGTTCCTTGTGAGGGTCCACCTGGC TCTGAACCTCCTAGGAGACCACCACCTGCCCCCACGATGGGGACAGAAAGGAGCTGCCCCGGGAGCAGCCTCTG CCCCTGGCCCCATTGGCACAGAACGATCACAGCATACAGACCGAGGCACAGAGCCTGGCCCCATTCGGCCATCC CATCGACCTGGTCCCCCAGTCCAGTTTGGCACTAGTGACAAGGACTCAGACTTACGCCTAGTGGTAGGAGACAGC TTGAAAGCAGAAGGAGCTAACAGCATCAGTCACTGAGGCCATTCCTGTATCACGAGACTGGGAGCTGCTTCCC AGTGCTGCTGCTGCTGAGCCACAATCCAAGAACCTGGATTCTGGGCACTGTGTCCCGGAGCCCAGCTCCTCA GGCCAGCGCCTGTATCCTGAGGTTTTCTATGGCAGTGCTGGGCCTTCCAGTTCTCAGATCTCTGGGGGAGCCATG GACTCTCAATTACATCCAAACAGTGGAGGCTTCCGCCCTGGGACACCCTCACTGCACCCTTACAGATCACAGCCC CTATACCTACCCCCGGCCCAGCCCTCCCTCAGCACTGCTCTCTGGGGTAGCTCTCAAGGGCCAGTTTCTGGAT TACTCTCCGGCTTTCTGCCCCAGTCCTTTGCCTGACACATCGTTGCTTCAGGTACGCCAGGATCTGCCATCCCCT TCGGATTTTTATTCTACTCCTCTGCAGCCTGGTGGCCAAAGTGGCTTTCTCCCTTCAGGGGCTCCTGCCCAGCAG ATGCTTCTACCCATGGTAGACTCACAGCTGCCTGTGGTGAACTTTGGCTCCCTGCCGCCAGCACCACCTCCTGCC CCACCTCCCCTTTCTCTGTTACCTGTGGGCCCTGCTCTGCAGCCCCCAGCCTGGCTGTGCGGCCCCCACCTGCT CCTGCTACTCGGGTGCTGCCTTCACCTGCCAGGCCCTTCCCCGCTAGCTTGGGGCGAGCAGAGCTGCATCCAGTG GAACTAAAGCCGTTCCAGGATTATCAAAAACTGAGCAGCAACCTTGGGGGACCTGGATCATCACGGACTCCCCCA ACTGGAAGGTCCTTCTCTGGCCTCAATTCCCGTCTCAAGGCCACGCCTTCCACCTACAGTGGAGTCTTCCGCACC CAGCGCGTCGACCTTTACCAGCAGGCCTCCCCACCAGATGCCCTGCGCTGGATACCTAAGCCTTGGGAGCGGACA GGGCTGCCACCTCGAGAAGGGCCCTCCCGACGGCCAGAGGAGCCTGGGTCCCGAGGGGACAAGGAGCCTGGGTTG CCCCACCCGC<u>TGA</u>GGGAGTTCCTCTTGCCCCCTACCCCGGGGCTTGTATATAGATTATAAATATATAAGGGG GAAAGGGGTGGGCGGGGGGTTGTGGGGCTGGGGCCTCACTTCCCCTCCCCCCTTCCCCTGGTCCCCTGTC CCTGGGGCTGTTTGTTAAAAAAGAGTAATAAAAGGATTT

PCT/US2003/028547

FIGURE 1980

MSDRSGPTAKGKDGKKYSSLNLFDTYKGKSLEIQKPAVAPRHGLQSLGKVAIARRMPPPANLPSLKAENKGNDPN VSLVPKDGTGWASKQEQSDPKSSDASTAQPPESQPLPASQTPASNQPKRPPAAPENTPLVPSGVKSWAQASVTHG AHGDGGRASSLLSRFSREEFFTLQAAGDQDKAAKERESAEQSSGPGPSLRPQNSTTWRDGGGRGPDELEGPDSKL HHGHDPRGGLQPSGPPQFPPYRGMMPPFMYPPYLPFPPPYGPQGPYRYPTPDGPSRFPRVAGPRGSGPPMRLVEP VGRPSILKEDNLKEFDOLDOENDDGWAGAHEEVDYTEKLKFSDEEDGRDSDEEGAEGHRDSQSASGEERPPEADG KKGNSPNSEPPTPKTAWAETSRPPETEPGPPAPKPPLPPGDYPDRGGPPCKPPAPEDEDEAWRQRRKQSSSEISL AVERARRREEEERRMOEERRAACAEKLKRLDEKFGAPDKRLKAEPAAPPAAPSTPAPPPAVPKELPAPPAPPPA SAPTPEKEPEEPAQAPPAQSTPTPGVAAAPTLVSGGGSTSSTSSGSFEASPVEPQLPSKEGPEPPEEVPPPTTPP VPKVEPKGDGIGPTRQPPSQGLGYPKYQKSLPPRFQRQQQEQLLKQQQQHQWQQHQQGSAPPTPVPPSPPQPVTL GAVPAPQAPPPPPKALYPGALGRPPPMPPMNFDPRWMMIPPYVDPRLLQGRPPLDFYPPGVHPSGLVPRERSDSG GSSSEPFDRHAPAMLRERGTPPVDPKLAWVGDVFTATPAEPRPLTSPLRQAADEDDKGMRSETPPVPPPPPYLAS YPGFPENGAPGPPISRFPLEEPGPRPLPWPPGSDEVAKIQTPPPKKEPPKEETAQLTGPEAGRKPARGVGSGGQG PPPPRRESRTETRWGPRPGSSRRGIPPEEPGAPPRRAGPIKKPPPPTKVEELPPKPLEQGDETPKPPKPDPLKIT KGKLGGPKETPPNGNLSPAPRLRRDYSYERVGPTSCRGRGRGEYFARGRGFRGTYGGRGARSREFRSYREFRG DDGRGGGTGGPNHPPAPRGRTASETRSEGSEYEE IPKRRRQRGSETGSETHESDLAPSDKEAPTPKEGTLTQVPL APPPPGAPPSPAPARFTARGGRVFTPRGVPSRRGRGGGRPPPQVCPGWSPPAKSLAPKKPPTGPLPPSKEPLKEK LIPGPLSPVARGGSNGGSNVGMEDGERPRRRRHGRAQQQDKPPRFRRLKQERENAARGSEGKPSLTLPASAPAPE EALTTVTVAPAPRRAAAKSPDLSNQNSDQANEEWETASESSDFTSERRGDKEAPPPVLLTPKAVGTPGGGGGGAV PGISAMSRGDLSORAKDLSKRSFSSORPGMERONRRPGPGGKAGSSGSSGGGGGGGGGGGTGPGRGDKRSWPSPK NRSRPPEERPPGLPLPPPPPSSSAVFRLDQVIHSNPAGIQQALAQLSSRQGSVTAPGGHPRHKPGPPQAPQGPSP RPPTRYEPQRVNSGLSSDPHFEEPGPMVRGVGGTPRDSAGVSPFPPKRRERPPRKPELLQEESLPPPHSSGFLGS KPEGPGPQAESRDTGTEALTPHIWNRLHTATSRKSYRPSSMEPWMEPLSPFEDVAGTEMSQSDSGVDLSGDSQVS SGPCSQRSSPDGGLKGAAEGPPKRPGGSSPLNAVPCEGPPGSEPPRRPPPAPHDGDRKELPREQPLPPGPIGTER SOHTDRGTEPGPIRPSHRPGPPVOFGTSDKDSDLRLVVGDSLKAEKELTASVTEAIPVSRDWELLPSAAASAEPQ SKNLDSGHCVPEPSSSGQRLYPEVFYGSAGPSSSQISGGAMDSQLHPNSGGFRPGTPSLHPYRSQPLYLPPGPAP PSALLSGVALKGOFLDFSTMOATELGKLPAGGVLYPPPSFLYSPAFCPSPLPDTSLLQVRQDLPSPSDFYSTPLQ ${\tt PGGQSGFLPSGAPAQQMLLPMVDSQLPVVNFGSLPPAPPPLSLLPVGPALQPPSLAVRPPPAPATRVLPSP}$ ARPFPASLGRAELHPVELKPFQDYQKLSSNLGGPGSSRTPPTGRSFSGLNSRLKATPSTYSGVFRTQRVDLYQQA SPPDALRWIPKPWERTGLPPREGPSRRAEEPGSRGDKEPGLPPPR

PCT/US2003/028547

FIGURE 1981A

CCCTAGGCCCGGGTCCCGGATCCCGCGCACCCGGCCAGGCTCTGGCACGTTTTGGGGGAGGTGCCTGCAGGACC CAACATACTCAATGAGCTTCCAGCGCAATGTCCGATCGCTCGGGGCCGACTGCCAAGGGAAAGGATGGAAAGAAG TATTCCTCGCTCAACCTGTTTGATACGTATAAGGGCAAGTCCTTAGAGATCCAGAAACCCGCTGTTGCCCCTCGC CATGGCCTGCAGAGTCTCGGGAAAGTTGCCATTGCCCGGCGTATGCCACCTCCAGCCAACCTTCCAAGCCTGAAA CAGTCCGACCCCAAGAGTTCCGATGCCTCAACCGCTCAGCCGCCGGAATCGCAGCCACTGCCGGCTTCACAGACG CCTGCCTCCAACCAGCCGAAACGACCCCCAGCAGCCCCCGAGAACACTCCTTTGGTTCCAAGCGGGGTAAAGTCC TGGGCACAAGCCAGCGTCACCCATGGAGCACATGGAGATGGTGGAAGGGCATCAAGCCTACTGTCACGATTCTCT CGAGAGGAATTTCCGACCCTGCAGGCGGCTGGCGACCAGGACAAGGCTGCCAAGGAAAGGGAGTCTGCCGAACAG TCGTCTGGGCCCGGACCAAGCCTCCGCCCCAAAATTCTACAACTTGGAGGGACGGAGGTGGGCGTGGCCCTGAT GAGCTGGAGGGCCCGGACTCCAAACTTCATCATGGTCATGATCCCCGGGGTGGGCTACAGCCTTCAGGCCCACCC CAGTTCCCTCCCTACCGCGGAATGATGCCGCCTTTCATGTATCCCCCATATCTCCCGTTCCCTCCGCCCTATGGA CCCCAGGGGCCTTACCGATACCCCACTCCTGATGGGCCCAGCCGTTTTCCCCGTGTGGCGGGCCCCGAGGCTCA GGGCCACCAATGCGCTTAGTAGAGCCTGTGGGTCGTCCCTCTATTCTCAAAGAGGATAATCTCAAAGAGTTTGAT CAGTTGGATCAGGAGAATGATGATGGTTGGGCAGGGGCCCATGAAGAGGTTGACTACACTGAAAAGCTCAAGTTC GAGGAACGGCCCCTGAAGCAGATGGCAAAAAGGGCAACTCCCCCAACAGCGAACCGCCCACTCCTAAGACGGCC TGGGCAGAAACCTCTCGGCCTCCAGAGACAGAGCCGGGACCTCCTGCCCCAAAGCCTCCCCTACCCCCACCTCAC CGGGGCCCGCCGGGAACTGGGGCCCCCCTGGGGACTACCCAGATCGTGGGGGTCCTCCCTGCAAGCCCCCAGCA CCTGAAGATGAGGATGAGGCATGGCGGCAGCGAAAGCAGTCGTCATCTGAGATTTCCCTGGCAGTGGAGCGG GCCCGGCGACGGCGAGAAGAGAGGAGCGCGCGCATGCAAGAAGAGCGCCGGGCAGCCTGTGCTGAGAAGCTCAAG CGACTCGATGAAAAGTTTGGGGCACCTGACAAGCGGCTCAAAGCAGAGCCTGCTGCCCCACCTGCTGCCCCTTCT ACCCCAGCTCCACCACCTGCAGTCCCTAAAGAACTCCCTGCACCTCCAGCTCCACCTCCAGCATCAGCCCCAACA CCAGAGAAAGAACCTGAAGAGCCAGCACAGGCCCCTCCTGCCCAATCTACTCCTACTCCAGGTGTGGCTGCGGCT CAACTGCCCTCAAAAGAGGGTCCTGAACCACAGAAGAGGTTCCTCCTCCTACCACACCCCCAGTTCCAAAGGTG GAACCCAAGGGTGATGGGATTGGTCCCACCCGCCAGCCCCCTAGTCAGGGCTTGGGCTACCCCAAATATCAGAAG ATGAACTTTGATCCCCGATGGATGATTCCTCCTTATGTGGACCCCCGGCTCCTCCAGGGTCGTCCCCCTCTA GACTTCTACCCTCCTGGTGTGCATCCCTCTGGCCTAGTTCCCCGAGAGCGTTCAGACAGTGGGGGCTCAAGCTCA GAGCCATTTGACCGTCATGCACCTGCTATGTTACGGGAACGGGGCACTCCACCGGTGGATCCAAAGTTGGCCTGG GTAGGAGATGTCTTCACCGCCACACCCGCTGAACCCCGCCCACTTACCTCACCTCTGCGCCAGGCTGCGGATGAG GATGACAAGGGGATGAGGAGCGAGACTCCTCCAGTACCTCCCCACCACCATATCTGGCCAGTTATCCAGGCTTT CCTGAGAATGGAGCCCCTGGGCCCCCAATCTCTCGCTTTCCTCTGGAGGAACCAGGGCCCCGTCCACTCCCCTGG CCCCAGGCAGTGATGAAGTGGCCAAGATACAAACTCCACCACCAAGAAGGAGCCCCCTAAGGAGGAGACTGCA CAGCTGACGGGGCCAGAAGCCGGAAAGCCTGCCCGCGGAGTCGGGAGTGGAGGCCAGGGCCCCCCACCACCA CGCAGAGAGAGTCGCACAGAGACCCGCTGGGGCCCTCGTCCAGGGAGCAGTCGTCGTGGAATCCCTCCAGAGGAG CCAGGGGCCCCACCCGCCGGGCTGGGCCTATAAAGAAACCTCCACCACCTACAAAAGTAGAAGAGCTGCCTCCC AAGCCCCTCGAACAGGGGGATGAAACCCCCCAAACCCCCAAAGCCAGACCCACTCAAGATAACCAAGGGGAAGCTA GGGGGCCCCAAGGAGACCCCACCCAATGGAAATCTTTCCCCTGCCCCAAGGCTTCGGAGGGACTATTCGTATGAA TATGGGGGACGAGGCGGGAGCCCGAAGCCGGGAATTCCGCAGTTACCGAGAGTTTCGAGGAGATGATGGGCGT TCAGAGTATGAGGAAATCCCCAAGCGGCGCCGGCAGCGGGCTCAGAAACAGGCAGCGAGACCCATGAGAGTGAT CCAGGAGCCCCACCTTCACCAGCCCCAGCCCGCTTCACTGCCCGGGGTGGGCGAGTCTTCACTCCCAGAGGGGTG

2156/6881 FIGURE 1981B

 $\verb|CCATCTCGCCGGGGCCGAGGAGGGGGGGGCCCCTCCTCAAGTTTGCCCAGGCTGGAGCCCTCCAGCCAAGTCT| \\$ CTGGCTCCCAAGAACCTCCCACAGGCCCTTTGCCACCAAGTAAGGAGCCTTTGAAAGAAGAAGTTGATCCCAGGG CCTCTGTCCCCTGTGGCGCGCGGAGGCAGCAATGGAGGTAGCAATGTGGGCATGGAAGATGGGGAGCGACCCCGA AGGAGGCGACATGGGAGGGCTCAGCAGCAGGATAAACCGCCTCGTTTCCGGAGGCTGAAGCAGGAACGGGAGAAT GCCGCAAGGGGGTCTGAGGGCAAGCCCTCCCTAACCCTTCCAGCCTCCGCTCCTGCACCTGAGGAGGCCCTCACA ACAGTCACAGTGGCCCCAGCACCTCGCCGGGCAGCTGCCAAGTCTCCTGATCTGTCAAACCAGAACTCAGACCAA GCCAATGAGGAATGGGAGACTGCATCAGAGAGCAGTGACTTCACCAGTGAGCGCCGAGGGGACAAAGAGGCACCC CCACCAGTACTGCTGACACCCAAGGCTGTGGGAACTCCTGGGGGGAGGTGGAGGTGGAGCCGTACCAGGTATTTCA GCCATGTCCCGCGGAGATCTGAGCCAGAGAGCCAAGGATTTGAGTAAACGGAGCTTCTCAAGTCAGCGGCCAGGC ATGGAACGGCAGAATCGGCGCCCTGGCCCAGGGGGCAAGGCTGGCAGCAGTGGCAGCAGCAGTGGAGGAGGCGGT GGGGGTCCTGGAGGAAGGACCGGGCCAGGACGAGGCGACAAGAGGAGCTGGCCCTCTCCCAAGAACCGAAGTCGT CCTCCAGAGGAGCGTCCCCGGGGCTTCCCCTGCCTCCCCACCTCCCAGCAGTTCTGCTGTCTTCCGCCTGGAC CAAGTTATCCACAGCAACCCTGCTGGCATCCAACAGGCTCTGGCCCAGCTTAGTAGCCGTCAAGGGAGTGTAACT GCACCAGGGGTCATCCAAGGCACAAGCCTGGGCCTCCCCAAGCCCCTCAGGGCCCCTCTCCTAGGCCCCCAACC CGATACGAGCCCCAGAGGGTCAACAGCGGCCTCAGTTCTGACCCCCACTTTGAGGAGCCGGGGCCAATGGTGAGA GGGGTGGGTGGGACTCCTCGGGACTCTGCCGGGGTTAGTCCCTTTCCCCCTAAACGTCGGGAGCGGCCTCCCAGA AAACCAGAGCTGCTACAGGAGGAATCTTTGCCACCTCCTCATAGCTCTGGATTCTTGGGCTCTAAGCCTGAGGGC CCAGGCCTCAGGCAGAGTCCAGAGATACAGGCACAGAGGCCCTGACCCTCACATCTGGAACCGTTTACATACT GCTGGCACAGAATGAGTCAGTCTGACAGTGGGGTGGACCTGAGTGGGGATTCTCAGGTGCATCAGGTCCCTGC AGCCAGCGAAGTTCCCCTGATGGAGGACTCAAGGGGGCAGCAGAGGGACCCCCCAAGAGGCCTGGAGGCTCCTCA CCCCTGAATGCTGTTCCTTGTGAGGGTCCACCTGGCTCTGAACCTCCTAGGAGACCACCACCTGCCCCCACGAT GGGGACAGAAAGGAGCTGCCCCGGGAGCAGCCTCTGCCCCCTGGCCCCATTGGCACAGAACGATCACAGCATACA GACCGAGGCACAGAGCCTGGCCCCATTCGGCCATCCCATCGACCTGGTCCCCAGTCCAGTTTGGCACTAGTGAC AAGGACTCAGACTTACGCCTAGTGGTAGGAGACAGCTTGAAAGCAGAAGGAGCTAACAGCATCAGTCACTGAG GCCATTCCTGTATCACGAGACTGGGAGCTGCTTCCCAGTGCTGCTGCTGCTGAGCCACAATCCAAGAACCTG GATTCTGGGCACTGTGTCCCGGAGCCCAGCTCCTCAGGCCAGCGCCTGTATCCTGAGGTTTTCTATGGCAGTGCT GGGCCTTCCAGTTCTCAGATCTCTGGGGGAGCCATGGACTCTCAATTACATCCAAACAGTGGAGGCTTCCGCCCT CTCTCTGGGGTAGCTCTCAAGGGCCAGTTTCTGGATTTCTCCACAATGCAAGCTACAGAGCTGGGGAAGTTGCCG GCTGGAGGAGTTCTCTACCCTCCACCTTCCTTCCTCTACTCTCCGGCTTTCTGCCCCAGTCCTTTGCCTGACACA TCGTTGCTTCAGGTACGCCAGGATCTGCCATCCCCTTCGGATTTTTATTCTACTCCTCTGCAGCCTGGTGGCCAA AGTGGCTTTCTCCCTTCAGGGGCTCCTGCCCAGCAGATGCTTCTACCCATGGTAGACTCACAGCTGCCTGTGGTG AACTTTGGCTCCCTGCCGCCAGCACCACCTCCTGCCCCACCTCCCCTTTCTCTGTTACCTGTGGGCCCTGCTCTG CAGCCCCCAGCCTGGCTGTGCGGCCCCCACCTGCTCCTGCTACTCGGGTGCTGCCTTCACCTGCCAGGCCCTTC CCCGCTAGCTTGGGGCGAGCAGAGCTGCATCCAGTGGAACTAAAGCCGTTCCAGGATTATCAAAAACTGAGCAGC AACCTTGGGGGACCTGGATCATCACGGACTCCCCCAACTGGAAGGTCCTTCTCTGGCCTCAATTCCCGTCTCAAG GCCACGCCTTCCACCTACAGTGGAGTCTTCCGCACCCAGCGGTCGACCTTTACCAGCAGGCCTCCCCACCAGAT GCCCTGCGCTGGATACCTAAGCCTTGGGAGCGGACAGGGCTGCCACCTCGAGAAGGGCCCTCCCGACGGGCAGAG GAGCCTGGGTCCCGAGGGGACAAGGAGCCTGGGTTGCCCCCACCCCGC<u>TGA</u>GGGAGTTCCTCTTGCCCCCTACCC CACTTCCCCTCCCCCTGGTCCCTGGTCCCTGGGGCTGTTTGTTAAAAAAAGAGTAATAAAAGGATTT

2157/6881 FIGURE 1982

MSDRSGPTAKGKDGKKYSSLNLFDTYKGKSLEIQKPAVAPRHGLQSLGKVAIARRMPPPANLPSLKAENKGNDPN VSLVPKDGTGWASKQEQSDPKSSDASTAQPPESQPLPASQTPASNQPKRPPAAPENTPLVPSGVKSWAQASVTHG AHGDGGRASSLLSRFSREEFPTLQAAGDQDKAAKERESAEQSSGPGPSLRPQNSTTWRDGGGRGPDELEGPDSKL $\tt HHGHDPRGGLQPSGPPQFPPYRGMMPPFMYPPYLPFPPPYGPQGPYRYPTPDGPSRFPRVAGPRGSGPPMRLVEP$ VGRPSILKEDNLKEFDQLDQENDDGWAGAHEEVDYTEKLKFSDEEDGRDSDEEGAEGHRDSQSASGEERPPEADG KKGNSPNSEPPTPKTAWAETSRPPETEPGPPAPKPPLPPPHRGPAGNWGPPGDYPDRGGPPCKPPAPEDEDEAWR QRRKQSSSEISLAVERARRREEEERRMQEERRAACAEKLKRLDEKFGAPDKRLKAEPAAPPAAPSTPAPPPAVP $\mathtt{KELPAPPAPPPASAPTPEKEPEEPAQAPPAQSTPTPGVAAAPTLVSGGGSTSSTSSGSFEASPVEPQLPSKEGPE}$ PPEEVPPPTTPPVPKVEPKGDGIGPTRQPPSQGLGYPKYQKSLPPRFQRQQQEQLLKQQQQHQWQQHQQGSAPPT ${\tt PVPPSPPQPVTLGAVPAPQAPPPPPKALYPGALGRPPPMPPMNFDPRWMMIPPYVDPRLLQGRPPLDFYPPGVHP}$ ${\tt SGLVPRERSDSGGSSSEPFDRHAPAMLRERGTPPVDPKLAWVGDVFTATPAEPRPLTSPLRQAADEDDKGMRSET}$ PPVPPPPYLASYPGFPENGAPGPPISRFPLEEPGPRPLPWPPGSDEVAKIQTPPPKKEPPKEETAQLTGPEAGR KPARGVGSGGQGPPPPRRESRTETRWGPRPGSSRRGIPPEEPGAPPRRAGPIKKPPPPTKVEELPPKPLEQGDET PKPPKPDPLKITKGKLGGPKETPPNGNLSPAPRLRRDYSYERVGPTSCRGRGEYFARGRGFRGTYGGRGAR SREFRSYREFRGDDGRGGGTGGPNHPPAPRGRTASETRSEGSEYEEIPKRRRQRGSETGSETHESDLAPSDKEAP TPKEGTLTQVPLAPPPPGAPPSPAPARFTARGGRVFTPRGVPSRRGRGGGRPPPQVCPGWSPPAKSLAPKKPPTG ${\tt PLPPSKEPLKEKLIPGPLSPVARGGSNGGSNVGMEDGERPRRRRHGRAQQQDKPPRFRRLKQERENAARGSEGKP}$ SLTLPASAPAPEEALTTVTVAPAPRRAAAKSPDLSNQNSDQANEEWETASESSDFTSERRGDKEAPPPVLLTPKA VGTPGGGGGGAVPGISAMSRGDLSQRAKDLSKRSFSSQRPGMERQNRRPGPGGKAGSSGSSSGGGGGGGGGRTGP ${\tt GRGDKRSWPSPKNRSRPPEERPPGLPLPPPPPSSSAVFRLDQVIHSNPAGIQQALAQLSSRQGSVTAPGGHPRHK}$ PGPPQAPQGPSPRPPTRYEPQRVNSGLSSDPHFEEPGPMVRGVGGTPRDSAGVSPFPPKRRERPPRKPELLQEES LPPPHSSGFLGSKPEGPGPQAESRDTGTEALTPHIWNRLHTATSRKSYRPSSMEPWMEPLSPFEDVAGTEMSQSD ${\tt SGVDLSGDSQVSSGPCSQRSSPDGGLKGAAEGPPKRPGGSSPLNAVPCEGPPGSEPPRRPPPAPHDGDRKELPRE}$ QPLPPGPIGTERSQHTDRGTEPGPIRPSHRPGPPVQFGTSDKDSDLRLVVGDSLKAEKELTASVTEAIPVSRDWE ${ t LLPSAAASAEPQSKNLDSGHCVPEPSSSGQRLYPEVFYGSAGPSSSQISGGAMDSQLHPNSGGFRPGTPSLHPYR}$ ${\tt SQPLYLPPGPAPPSALLSGVALKGQFLDFSTMQATELGKLPAGGVLYPPPSFLYSPAFCPSPLPDTSLLQVRQDL}$ PSPSDFYSTPLQPGGQSGFLPSGAPAQQMLLPMVDSQLPVVNFGSLPPAPPPAPPPLSLLPVGPALQPPSLAVRP PPAPATRVLPSPARPFPASLGRAELHPVELKPFQDYQKLSSNLGGPGSSRTPPTGRSFSGLNSRLKATPSTYSGV FRTQRVDLYQQASPPDALRWIPKPWERTGLPPREGPSRRAEEPGSRGDKEPGLPPPR

2158/6881 FIGURE 1983

TCCCGCCGCCAACGCCGAGAACGTCGCTTTCGTCGTTACTTGTCTGCAGGACGGCTCGGTCCGGGCCCAGGCCCTC $\tt CTCCAGCGACACCCAGGCCTCGATGTAGATGCTGGGCAGCCCCCACCACCACCGGGCCTGTGCCCGCCACGAT$ GCCCTGCCCTGTGCCTGCTTCGGCTCGGGGCTGACCCTGCCCACCAGGACCGCCATGGGGACACGGCACTG CATGCTGCTGCCCGCCAGGGCCCAGATGCCTACACCGATTTCTTCCTCCCGCTGCTAAGCCGCTGTCCCTCCGCC ATGGGAATAAAGAATAAGGATGGGGAGACCCCTGGCCAAATTTTGGGCTGGGGACCCCCTGGGATTCTGCTGAA GAGGAGGAAGAAGATGATGCCTCCAAGGAGCGGGAATGGAGACAGAAGCTCCAGGGTGAGCTGGAGGACGAGTGG CAGGAAGTCATGGGGAGGTTTGAAGGTGATGCCTCCCATGAAACCCAGGAACCTGAGTCCTTCTCAGCCTGGTCA GATCGCCTGGCCCGGGAACATGCCCAGAAGTGCCAGCAGCAGCAGCAGCAGCAGAGGGATCCTGTCGACCCCCA CGTGCTGAGGGCTCCAGCCAGAGCTGGCGACAGCAGGAGGAGGAGCAGCCGGCTCTTCAGGGAGCCAGGCCCGGGCC AAGGAGGAAGAGCTGCGTGAGAGCCGAGCCAGGAGGCGCAGGAGGCTCTAGGGGACCGAGACCCAAGCCAACC AGGGCCGGGCCCAGGGAAGAGCACCCCAGAGGAGCGGGGAGGGGCAGCCTCTGGCGATTTGGTGATGTGCCCTGG CCCTGCCCTGGGGGAGGGGACCCAGAGGCCATGGCTGCAGCCCTGGTGGCCAGGGGCCCCCCTTTGGAGGAACAG GGGGCTCTGAGGAGGTACTTGAGGGTCCAGCAGGTCCGCTGGCACCGCTTCCTGCAGCGATTCCGAAGC CAGATTGAGACCTGGGAGCTGGGCCGTGTGATGGGAGCAGTGACAGCCCTTTCTCAGGCCCTGAATCGCCATGCA AACAAGTGGGGGTGGGGGGCGCCCCCCCCCCCTGCTCCTTGACTCTGCCGTTTCCTAATAAGACCTGGTTCC ACATCTC

PCT/US2003/028547

2159/6881 FIGURE 1984

 ${\tt ACAGGCATTTTCCAAAGGCAAGCCTGGAGCGCACGGATCTGTATAACCGCGGAAGGCCCTGTTTCCGGTCCCTTG}$ CGCCTGCGCTCTTGCAGCCAAGAAGGCGGGAGGCTGGAGTAGAGGGAAGCCTGCAACCGGAAGTGAAGGCAGATT TCCCTCCTTCGTCGCTGTTGCTGCCGCCATACGCGCTCTCCCTGTTTAGTT<u>ATC</u>GCAGAGAACGATGTGGACAAT GAGCTCTTGGACTATGAAGATGATGAGGTGGAGACAGCAGCTGGGGGGAGATGGGGCTGAGGCCCCTGCCAAGAAG GATGTCAAGGGCTCCTATGTCTCCACCACAGCTCTGGCTTTCGTGACTTCCTGCTCAAGCCAGAGTTGCTCCGG GCCATTGTCGACTGTGGCTTTGAGCATCCGTCAGAAGTCCAGCATGAGTGCATCCCTCAGGCCATTCTGGGAATG GATGTCCTGTGCCAGGCCAAGTCGGGCATGGGAAAGACAGCAGTGTTTGTCTTGGCCACACTGCAACAGCTGGAG CCAGTTACTGGGCAGGTGTCTGTGCTGATGTGTCACACTCGGGAGTTGGCTTTTCAGATCAGCAAGGAATAT GAGGTGCTGAAGAAGAACTGCCCGCATATCGTCGTGGGGACTCCAGGCCGTATCCTAGCCCTGGCTCGAAATAAG AGCCTCAACCTCAAACACATTAAACACTTTATTTTGGATGAATGTGATAAGATGCTTGAACAGCTCGACATGCGT CGGGATGTCCAGGAAATTTTTCGCATGACCCCCCACGAGAAGCAGGTCATGATGTTCAGTGCTACCTTGAGCAAA GAGATCCGTCCAGTCTGCCGCAAGTTCATGCAAGATCCAATGGAGATCTTCGTGGATGATGAGACGAAGTTGACG CTGCATGGGTTGCAGCAGTACTACGTGAAACTGAAGGACAACGAGAAGCACCGGAAGCTCTTTGACCTTCTGGAT GTCCTTGAGTTCAACCAGGTGGTGATCTTTGTGAAGTCTGTGCAGCGGTGCATTGCCTTGGCCCAGCTACTAGTG GAGCAGAACTTCCCAGCCATTGCCATCCACCGTGGGATGCCCCAGGAGGAGGGCTTTCTCGGTATCAGCAGTTT AAAGATTTTCAACGACGAATTCTTGTGGCTACCAACCTATTTGGCCGAGGCATGGACATCGAGCGGTGAACATT AAGGGCTTGGCTATCACATTTGTGTCCGATGAGAATGATGCCAAGATCCTCAATGATGTGCAGGATCGCTTTGAG ${\tt GTCAATATTAGTGAGCTGCCTGATGAGATAGACATCTCCTCCTACATTGAACAGACACGG{\tt {\tt TAG}}{\tt AGACTCGCCCA}}$ TTTTGGAATGTGACCGTCTGTCCTTCAGGAGAGGACACCAGGGTGGGGGTGAAGGAGACACTACTGCCCCCACCC $\tt CTGACAGCCCCACCCCATGGCTTCCATCTTTTGCATCACCACCACTCCTGAACCCCCATTTCTGATTTGTCAGA_$

PCT/US2003/028547

FIGURE 1985

MAENDVDNELLDYEDDEVETAAGGDGAEAPAKKDVKGSYVSIHSSGFRDFLLKPELLRAIVDCGFEHPSEVQHEC IPQAILGMDVLCQAKSGMGKTAVFVLATLQQLEPVTGQVSVLVMCHTRELAFQISKEYERFSKYMPNVKVAVFFG GLSIKKDEEVLKKNCPHIVVGTPGRILALARNKSLNLKHIKHFILDECDKMLEQLDMRRDVQEIFRMTPHEKQVM MFSATLSKEIRPVCRKFMQDPMEIFVDDETKLTLHGLQQYYVKLKDNEKNRKLFDLLDVLEFNQVVIFVKSVQRC IALAQLLVEQNFPAIAIHRGMPQEERLSRYQQFKDFQRRILVATNLFGRGMDIERVNIAFNYDMPEDSDTYLHRV ARAGRFGTKGLAITFVSDENDAKILNDVQDRFEVNISELPDEIDISSYIEQTR

PCT/US2003/028547

FIGURE 1986

ACAGGCATTTTCCAAAGGCAAGCCTGGAGCGCACGGATCTGTATAACCGCGGAAGGCCCTGTTTCCGGTCCCTTG CGCCTGCGCTCTTGCAGCCAAGAAGGCGGGAGGCTGGAGTAGAGGGAAGCCTGCAACCGGAAGTGAAGGCAGATT TCCCTCCTTCGTCGCTGTTGCTGCCGCCATACGCGCTCTCCCTGTTTAGCTCTTCTGTTAGAAATAGTATCTTTG TTTTCCTTTGCTGTTCCTCAATCCCCTACTCTTCACCCCTTGTTTTCACCTATTTTGCGAGAACCCATCCAGATC CCCCTTCCCTTCTCCCCTGCCGGCCCAGTT<u>ATG</u>CCAGAGAACGATGTGGACAATGAGCTCTTGGACTATGAAGA TGATGAGGTGGAGACAGCAGCTGGGGGAGATGGGGCCTGAGGCCCCTGCCAAGAAGGATGTCAAGGGCTCCTATGT CTCCATCCACAGCTCTGGCTTTCGTGACTTCCTGCTCAAGCCAGAGTTGCTCCGGGCCATTGTCGACTGTGGCTT TGAGCATCCGTCAGAAGTCCAGCATGAGTGCATCCCTCAGGCCATTCTGGGAATGGATGTCCTGTGCCAGGCCAA GTCGGGCATGGGAAAGACAGCAGTGTTTGTCTTGGCCACACTGCAACAGCTGGAGCCAGTTACTGGGCAGGTGTC TGTGCTGGTGATGTCACACTCGGGAGTTGGCTTTTCAGATCAGCAAGGAATATGAGCGCTTCTCTAAATACAT CCCGCATATCGTCGTGGGGACTCCAGGCCGTATCCTAGCCCTGGCTCGAAATAAGAGCCTCAAACCACAT TAAACACTTTATTTTGGATGAATGTGATAAGATGCTTGAACAGCTCGACATGCGTCGGGATGTCCAGGAAATTTT TCGCATGACCCCCCACGAGAAGCAGGTCATGATGTTCAGTGCTACCTTGAGCAAAGAGATCCGTCCAGTCTGCCG CAAGTTCATGCAAGATCCAATGGAGATCTTCGTGGATGATGAGACGAAGTTGACGCTGCATGGGTTGCAGCAGTA CTACGTGAAACTGAAGGACAACGAGAAGAACCGGAAGCTCTTTGACCTTCTGGATGTCCTTGAGTTCAACCAGGT GGTGATCTTTGTGAAGTCTGTGCAGCGGTGCATTGCCTTGGCCCAGCTACTAGTGGAGCAGAACTTCCCAGCCAT TGCCATCCACCGTGGGATGCCCCAGGAGGAGGGCTTTCTCGGTATCAGCAGTTTAAAGATTTTCAACGACGAAT TCTTGTGGCTACCAACCTATTTGGCCGAGGCATGGACATCGAGCGGGTGAACATTGCTTTTAATTATGACATGCC TGAGGATTCTGACACCTACCTGCATCGGGTGGCCAGAGCAGGCCGGTTTGGCACCAAGGGCTTGGCTATCACATT TGTGTCCGATGAGAATGATGCCAAGATCCTCAATGATGTGCAGGATCGCTTTGAGGTCAATATTAGTGAGCTGCC TGATGAGATAGACATCTCCTCCTACATTGAACAGACACGG<u>TAG</u>AAGACTCGCCCATTTTGGAATGTGACCGTCTG TCCTTCAGGAGAGACACCAGGGTGGGGGTGAAGGAGACACTACTGCCCCCACCCCTGACAGCCCCCACCCCATG

PCT/US2003/028547

FIGURE 1987

MAENDVDNELLDYEDDEVETAAGGDGAEAPAKKDVKGSYVSIHSSGFRDFLLKPELLRAIVDCGFEHPSEVQHEC IPQAILGMDVLCQAKSGMGKTAVFVLATLQQLEPVTGQVSVLVMCHTRELAFQISKEYERFSKYMPNVKVAVFFG GLSIKKDEEVLKKNCPHIVVGTPGRILALARNKSLNLKHIKHFILDECDKMLEQLDMRRDVQEIFRMTPHEKQVM MFSATLSKEIRPVCRKFMQDPMEIFVDDETKLTLHGLQQYYVKLKDNEKNRKLFDLLDVLEFNQVVIFVKSVQRC IALAQLLVEQNFPAIAIHRGMPQEERLSRYQQFKDFQRRILVATNLFGRGMDIERVNIAFNYDMPEDSDTYLHRV ARAGRFGTKGLAITFVSDENDAKILNDVQDRFEVNISELPDEIDISSYIEQTR

PCT/US2003/028547

2163/6881 FIGURE 1988

AGACGCCGAGATGCTGGTCATGGCGCCCCGAACCGTCCTCCTGCTGCTCTCCGGCGGCCCTGGCCCTGACCGAGAC CTGGGCCGGCTCCACTCCATGAGGTATTTCGACACCGCCATGTCCCGGCCCGGCCGCGGGGGAGCCCCGCTTCAT GGCGCCGTGGATAGAGCAGGAGGGGCCGGAGTATTGGGACCGGAACACACAGATCTTCAAGACCAACACACAGAC TGACCGAGAGACCTGCGGAACCTGCGCGGCTACTACAACCAGAGCGAGGCCGGGTCTCACACCCTCCAGAGCAT GTACGGCTGCGACGTGGGGCCGGACGGGCGCCTCCTCCGCGGGCATAACCAGTACGCCTACGACGGCAAGGATTA CATCGCCCTGAACGAGGACCTGCGCTCCTGGACCGCGGCGGACACCGCGGCTCAGATCACCCAGCGCAAGTGGGA GAACGGGAAGGACACGCTGGAGCGCGGGACCCCCCAAAGACACACGTGACCCACCACCCCATCTCTGACCATGA GGCCACCCTGAGGTGCTGGGCCCTGGGCTTCTACCCTGCGGAGATCACACTGACCTGGCAGCGGGATGGCGAGGA CCAAACTCAGGACACTGAGCTTGTGGAGACCAGACCAGCAGGAGATAGAACCTTCCAGAAGTGGGCAGCTGTGGT GGTGCCTTCTGGAGAAGAGCAGAGATACACATGCCATGTACAGCATGAGGGGCTGCCGAAGCCCCTCACCCTGAG ATGGGAGCCGTCTTCCCAGTCCACCGTCCCCATCGTGGCCATTGTTGCTGGCCTGGCTGTCCTAGCAGTTGTGGT TGCGTGCAGCGACAGTGCCCAGGGCTCTGATGTGTCTCTCACAGCTTGAAAAAGCCTGAGACAGCTGTCTTGTGAG GGACTGAGATGCAGGATTTCTTCACGCCTCCCCTTTGTGACTTCAAGAGCCTCTGGCATCTCTTTCTGCAAAGGC ACCTGAATGTGTCTGCGTCCCTGTTAGCATAATGTGAGGAGGTGGAGAGACAGCCCACCCTTGTGTCCACTGTGA CCCCTGTTCCCATGCTGACCTGTGTTTCCTCCCCAG

PCT/US2003/028547

2164/6881 FIGURE 1989

MLVMAPRTVLLLLSAALALTETWAGSHSMRYFDTAMSRPGRGEPRFISVGYVDDTQFVRFDSDAASPREEPRAPW IEQEGPEYWDRNTQIFKTNTQTDRESLRNLRGYYNQSEAGSHTLQSMYGCDVGPDGRLLRGHNQYAYDGKDYIAL NEDLRSWTAADTAAQITQRKWEAARVAEQDRAYLEGTCVEWLRRYLENGKDTLERADPPKTHVTHHPISDHEATL RCWALGFYPAEITLTWQRDGEDQTQDTELVETRPAGDRTFQKWAAVVVPSGEEQRYTCHVQHEGLPKPLTLRWEP SSQSTVPIVGIVAGLAVLAVVVIGAVVAAVMCRRKSSGGKGGSYSQAACSDSAQGSDVSLTA

PCT/US2003/028547

2165/6881 FIGURE 1990

PCT/US2003/028547

2166/6881 FIGURE 1991

 ${\tt MSHRKFSTPRHGSLGFLPWKRSSRHCGKVKSFPKDDPSKPVHLTAFLGYKAGMTHIVRALEKIDLKFIDTPSKFG}\\ {\tt HGHFQTMEEKKAFMGPLKKDRIAKEEGA}$

2167/6881 FIGURE 1992

ATTCTCCCCAGAGGCCGAGATGCGGGTCATGGCGCCCCGAGCCCTCCTCCTGCTGCTCTCGGGAGGCCTGGCCCT GACCGAGACCTGGGCCTGCTCCCACTCCATGAGGTATTTCGACACCGCCGTGTCCCGGCCCGGCCGCGGAGAGCC GGAGCCGCGGGCGCCGTGGGTGGAGCAGGAGGGGCCGGAGTATTGGGACCGGGAGACACAGAACTACAAGCGCCA GGCACAGGCTGACCGAGTGAGCCTGCGGAACCTGCGCGGCTACTACAACCAGAGCGAGGACGGGTCTCACACCCT CCAGAGGATGTATGGCTGCGACCTGGGGCCCGACGGGCGCCTCCTCCGCGGGTATGACCAGTCCGCCTACGACGG CAAGGATTACATCGCCCTGAACGAGGACCTGCGCTCCTGGACCGCGGGACACCGCGGCTCAGATCACCCAGCG ATACCTGGAGAACGGGAAGGAGACGCTGCAGCGCGCAGAACCCCCAAAGACACACGTGACCCACCACCCCTCTC TGACCATGAGGCCACCCTGAGGTGCTGGGCCCTGGGCTTCTACCCTGCGGAGATCACACTGACCTGGCAGCGGGA TGGGGAGGACCAGACCCAGGACACCGAGCTTGTGGAGACCAGGCCAGCAGGAGATGGAACCTTCCAGAAGTGGGC AGCTGTGGTGGTGCCTTCTGGACAAGAGCAGAGATACACGTGCCATATGCAGCACGAGGGGCTGCAAGAGCCCCT CACCCTGAGCTGGGAGCCATCTTCCCAGCCCACCATCCCCATCATGGGCATCGTTGCTGGCCTGGCTGTCCTGGT TGTCCTAGCTGTCCTTGGAGCTGTGGTCACCGCTATGATGTGTAGGAGGAAGAGCTCAGGGCATTTTCTTCCCAC AGGTGGAAAAGGAGGGAGCTGCTCTCAGGCTGCGTGCAGCAACAGTGCCCAGGGCTCTGATGAGTCTCTCATCAC TTGTAAAGCCTGAGACAGCTGCCTGTGTGGGACTGAGATGCAGGATTTCTTCACACCTCTCTTTTGTGACTTCAA GAGCCTCTGGCATCTCTTCTGCAAAGGCGTCTGAATGTGTCTGCGTTCCTGTTAGCATAATGTGAGGAGGTGGA TGTTCCAGAGAGGTGGGGCTGGATGTCTCCATCTCTGTCTCAAATTCATGGTGCACTGAGCTGCAACTTCTTACT TCCCTAATGAAGTTAAGAACCTGAATATAAATTTGTGTTCTCAAATATTTGCTATGAAGCGTTGATGGATTAATT AAATAAGTCAATTCCTAGAAGTIGAGAGAGCAAATAAAGACCTGAGAACCTTCCAG

PCT/US2003/028547

FIGURE 1993

MRVMAPRALLLLISGGLALTETWACSHSMRYFDTAVSRPGRGEPRFISVGYVDDTQFVRFDSDAASPRGEPRAPW VEQEGPEYWDRETQNYKRQAQADRVSLRNLRGYYNQSEDGSHTLQRMYGCDLGPDGRLLRGYDQSAYDGKDYIAL NEDLRSWTAADTAAQITQRKLEAARAAEQLRAYLEGTCVEWLRRYLENGKETLQRAEPPKTHVTHHPLSDHEATL RCWALGFYPAEITLTWQRDGEDQTQDTELVETRPAGDGTFQKWAAVVVPSGQEQRYTCHMQHEGLQEPLTLSWEP SSQPTIPIMGIVAGLAVLVVLAVLGAVVTAMMCRRKSSGHFLPTGGKGGSCSQAACSNSAQGSDESLITCKA

PCT/US2003/028547

FIGURE 1994

GGAAAGGTGTACGCAGGCGCAGTGGCGTCTAAATTTGGGCCCACTAAATGCGTCGGAGCATCTCCGCGCCCAGGC GGCTCCTCCTCACTGCGGCAACCCGGGAAAACTTGTGAACTAATCAGAAAAAGTGGAAGGCGGGAGATCTTGGGG GAAGTTCGGGCCCGGGAATTCCGAAGGAGGGGTAGGCGCTGCCCGCGCGCAGAGGCCGCCCCCTCCTGGCCCCG GCTTCTTGGCTGTCAAACAGATGCAGCAACGTCGGCTCCTGCCGAGGAGCCCAAGGGGTCCCGGGATCCGCCGCA CAGGCTGGCACTGCTTGAAGAGGAGGCTACTCGGAGACTGCGCCGCGGGGTAGATCCGAAACGGGGCTGGGGCG AGTGCTCTATTAGGATAAGCAAGTTTGACAGGAAGAAGCTGCTCTTCTCCGAATTACACAGAGGTGATGTTCG AAAGTATCCTTGCCTTGCAGATTGGAGGCTCCCCAAATATTTTGTGATCTGAGGATCCAGCTCAAGTGAGGTGCC ATAGGACGTGTTCCTGAGTTTGCATTGCACGGAGACCTTCCTGGAATTTTTCATTTGCAAGTCGGCTTAACCAAT TTTGCATTGAGTCCTAGGCTGCTTGCACTCTGAATTTGGGCTATTCAGGTAGTGTGCTCAAAGTTGAAACCGCAT ACAGCACAACTCAAGTTTGCATCAGACTGGGAAGCGAACTTAAGCCAGCGGTGCGTGGCCCAGGAGTGGGAAAGG AAATGGATGCCTGAAGTGGAAGAGGTGGTGCAGAGGGGGGCACCGCCCATGCTGCCCTGCTTCCAACTGCTGCGCA ACAGGGCCGACCTGTGTGATGTGGCCCTGCGGCCCCAGCAGGAGCCTGGCCTCATCTCTGGGATCCACGCCGAAC TGCATGCCGAGCCCCGGGGTGATGACTGGAGGGTCAGCCTGGAAGACCACAGCAGCCAAGGTGAGCATTAAGCAG GGCAGCTTTGCCCCTGGGTGGTTGAAGCGCCAGGCTGGAATGAGTAAGGTCTCCACAAGACCCTGCTGCCT CCCATACTCCCATCAGATTGGATGGATAGTCGTGGTCCAGACCTTCATCTTCCCACCAGAAGTGTGCACAGTCAG AAGCTCTCTGCCAGACTGACCCTTTTTGGTCCCGTTTAGCTCATACAGGACCTGGGATATCATCAGAAAGATATC ACAGTGGGGATGTTCTGAGGCCACTAGAGGCCAAGTTTAGACTTGATTCAGTTTCCAGCTTTGCTGAGGCACTCT GTTCCTGGGTTAGGGCAGTTCTATGTTGAATAATGTTTTTAATAATCTGGGCATGTCTTTCTCCGTGACTTGAGG CAGTTAGCCTCAGAAAGCCTAGATTCACATTTGAGTTTTGCCACTGCCTCTTGGTAAAGTCAGCTGTAGGAGTGT TATGGTTATTAGACTATAGTAGCCAACATTCATCTAGTGCTTACTGTTATGAGCCAGGCCCTATTTTAAGTGTAT TGAATGTAGGTGGTACTAATATTATCCTCATTTACAGTAAAGGAAAATGAGGCACAAAGAGGTTAAGGAACTTGT CCAGGGCTGGGCATGGTGGTTTACACCTATAATCCAGCACTTTGGGAGGCTAAGGCAGGGTGGATCACTTGAGCT AGCCTGGGCGCGGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCCGAGATGGGCAGATCACGAGGTCAGGA GTGGCGTGCACCTGTAACCCCAGCTACTCAGGAGGCTGAAGCAGCAGAATCACTTGAACCCGGGAGGCGGAGGTT ACCAAAAGCTTGCCCAGGGTCACATAACTGGTAAGTGGTAGAGCTAGGATCTGAACGAGCTGGAGCTGGGGGAGA GTGAGCATGTTTGAAAACTGGACCTTAGGGCGGGGCACGGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGC TGAGGCGGCAGATCAGGAGGTCAGGAGTATGAGACCAGCCTGGCCAACATGGTAAAACCCTGTCTCTGCTAAAA ATAAAAAAATTAGCCAGACGTGGTGGCACATGCCTGTAATCCCAGCTACTCAGGAGGCTGAGGCAGGAGAATTGC TTGAACCTGGGAGGCGGTTCAAGCTTGGGCAATAGAGCAAAACTCCATC

PCT/US2003/028547

2170/6881 FIGURE 1995

TTGGTGGATTCCTCAGTCCCTGCCGCCGCGGGGCCCCTGGGATAGCGGCGGGGCCTCCTGAACAGATCTCGGCC CCTTTCCAAACACTCCTGATGCCTCATTTGCCTCTCGCTTCTTTTCGACCACCATTTTGGGGGGCTGAGGCACTCA CGGGGCCTCCCCAGGTTTCACTCCGTTTCTACACAGTCGGAGCCCCATGGATCTCCCATCTCCCGGAGGAACCGT GAAGCCAAACAGAAGCGCCTGCGAGAGAAGCAGGCTACTCTGGAGGCTGAGATAGCAGGGGAGAGCAAGTCACCT GCAGAATCCATTAAGGCCTGGAGGCCTAAGGAGTTAGTATTGTATGAAATCCCTACGAAACCCGGTGAAAAGAAA GATGTCTCTGGGCCCCTGCCTCCTGCATACAGCCCCCGATATGTTGAGGCTGCCTGGTACCCGTGGTGGGTACGA GAGGGCTTCTTCAAACCAGAATATCAGGCCCGGCTGCCCCAAGCTACAGGGGAGACCTTTTCCATGTGTATCCCA CCTCCCAATGTCACTGGCTCCCTGCACATTGGCCACGCACTCACGGTGGCCATACAGGATGCCCTCGTGCGCTGG CACCGGATGCGTGGGGATCAAGTGCTGTGGGTCCCTGGTTCAGATCATGCAGGAATTGCTACACAAGCTGTGGTG CAGTGGAAGGAGGCGAAAGGTGGAGAGATCTGTGAGCAGCTGCGAGCTCTGGGTGCCTCCCTGGACTGGGATCGA GAGTGTTTTACCATGGATGTTGGCTCCTCAGTGGCTGTGACTGAAGCTTTTGTGCGGCTCTACAAGGCGGGGTTG CTGTACCGGAACCATCAGCTTGTCAACTGGTCATGTGCTTTAAGATCAGCCATCTCGGACATTGAGGTGGAGAAC $\tt CGGCCCTGCCTGGCCACACACACACTTCGACTGCCTGGCTGCCCCACCCCCGTGTCTTTTGGCCTCCTATTTTCT$ GTTGCCTTCCCCGTGGATGGAGGCCTGATGCAGAGGTTGTGGTAGGAACCACAAGGCCAGAGACGCTGCCTGGA GATGTGGCTGTGGCCGTTCATCCAGACGACTCGCGATACACACATCTACACGGGCGACAGCTTCGTCACCCCTTG ATGGGGCAGCCTCTTCCCCTCATCACAGACTATGCTGTTCAGCCACATGTGGGCACGGGGGCAGTGAAGGTGACT CCAGCTCACAGTCCTGCCGATGCTGAGATGGGGGCCCGACATGGCTTGAGCCCCTTGAATGTCATTGCGGAGGAT GGGACCATGACCTCCCTCTGCGGGGACTGGCTGCAGGGTCTTCACCGGTTTGTGGCCCGGGAAAAGATAATGTCT GTGCTGAGTGAATGGGGCCTGTTCCGGGGCCTCCAGAACCACCCCATGGTACTGCCCATCTGCAGCCGTTCTGGG GATGTGATAGAATACCTGCTGAAGAACCAGTGGTTTGTCCGCTGCCAGGAAATGGGGGCCCGAGCTGCCAAGGCT GTGGAGTCGGGGGCCCTGGAGCTCAGTCCCTCCTTCCACCAGAAGAACTGGCAGCACTGGTTTTCCCATATTGGG GACTGGTGTGTCTCCCGGCAGCTGTGGTGGGGCCATCAGATTCCAGCCTACCTGGTTGTAGAGGACCATGCGCAG GGAGAAGAGGACTGTTGGGTGGTTGGGCGGTCAGAGGCTGAGGCCAGAGAGGTAGCAGCGGAACTGACAGGGAGG ${\tt CCAGGGGCAGAGCTGACCCTGGAGAGGGATCCTGATGTCCTAGACACATGGTTTTCTTCTGCCCTGTTCCCCTTT}$ TCTGCCCTGGGCTGGCCCCAAGAGACCCCAGACCTTGCTCGTTTCTACCCCCTGTCACTTTTGGAAACGGGCAGC GACCTTCTGCTGTTCTGGGTGGGCCGCATGGTCATGTTGGGGACCCAGCTCACAGGGCAGCTGCCCTTCAGCAAG GTGCTTCTTCATCCCATGGTTCGGGACAGGCAGGGCCGGAAGATGAGCAAGTCCCTGGGGAATGTGCTGGACCCA AGAGACATCATCAGTGGGGTGGAGATGCAGGTGCTGCAGGAAAAGCTGAGAAGCGGAAATTTGGACCCTGCAGAG CTGGCCATTGTGGCTGCAGCACAGAAAAGGACTTTCCTCACGGGATCCCTGAGTGTGGGACAGATGCCCTGAGA TTCACACTCTGCTCCCATGGAGTTCAGGCGGGCGACTTGCACCTGTCAGTCTCTGAGGTCCAGAGCTGCCGACAT TTCTGCAACAAGATCTGGAATGCTCTTCGCTTTATCCTCAATGCTTTAGGGGAGAAATTTGTGCCACAGCCTGCT GAGGAGCTGTCTCCCTCCCCGATGGATGCCTGGATCCTGAGCCGCCTTGCCCTGGCTGCCCAGGAGTGTGAG CGGGGCTTCCTCACCCGAGAGCTCTCGCTCGTCACTCATGCCCTGCACCACTTCTGGCTTCACAACCTCTGTGAC GTCTACCTGGAGGCTGTGAAGCCCGTGCTGTGGCACTCGCCCCGCCCCCTGGGGCCCCCTCAGGTCCTGTTCTCC TGCGCTGACCTCGGCCTCCGCCTCCTGGCCCCACTGATGCCCTTCCTGGCTGAAGAGCTCTGGCAGAGGCTGCCC CCCAGGCCTGGTTGCCCCCCTGCCCCCAGCATCTCGGTTGCCCCCTACCCCAGCGCCTGCAGCTTGGAGCACTGG CGCCAGCCAGAGCTGGAGCGGCGCTTCTCCCGGGTCCAAGAGGTCGTGCAGGTGCTAAGGGCTCTCCGAGCCACG TACCAGCTCACCAAAGCCCGGCCCCGAGTGCTGCTGCAGAGCTCAGAGCCTGGGGGACCAGGGCCTCTTCGAGGCC GGCTGGGCCCAGGCTCACTCAGTGACACGGCTCAAGTCTACATGGAGCTGCAGGGCCTGGTGGACCCGCAGATC CAGCTACCTCTGTTAGCCGCCCGAAGGTACAAGTTGCAGAAGCAGCTTGACAGCCTCACAGCCAGGACCCCATCA GAAGGGGAGGCAGGGACTCAGAGGCAACAAAAGCTTTCTTCCCTCCAGCTGGAATTGTCAAAACTGGACAAGGCA GCCTCTCACCTCCGGCAGCTGATGGATGAGCCTCCAGCCCCAGGGAGCCCGGAGCTCTAACTCATCCCCATC AGTTTTCCTCCCTCTCAGACCTGTCTTTGAGGACAAACAGATTTGTCAGCTGTCAGGGTGCAGTGGGACGTCAGA GACTATGTGGTCCATCGCCTTCATTGTGTAAATGAGGACACAGACTGGCTTGGTCGCAGTGACTGTGGTGTCCTT GAGATGCTCACATTACTGCCCGGCCTGCCTCCCACCTGGAAGTCTGGGAATGAGGAGATTGAGATAAACTTTTGA AATCCC

PCT/US2003/028547

2171/6881 FIGURE 1996

MGQPLPLITDYAVQPHVGTGAVKVTPAHSPADAEMGARHGLSPLNVIAEDGTMTSLCGDWLQGLHRFVAREKIMS VLSEWGLFRGLQNHPMVLPICSRSGDVIEYLLKNQWFVRCQEMGARAAKAVESGALELSPSFHQKNWQHWFSHIG DWCVSRQLWWGHQIPAYLVVEDHAQGEEDCWVVGRSEAEAREVAAELTGRPGAELTLERDPDVLDTWFSSALFPF SALGWPQETPDLARFYPLSLLETGSDLLLFWVGRMVMLGTQLTGQLPFSKVLLHPMVRDRQGRKMSKSLGNVLDP RDIISGVEMQVLQEKLRSGNLDPAELAIVAAAQKKDFPHGIPECGTDALRFTLCSHGVQAGDLHLSVSEVQSCRH FCNKIWNALRFILNALGEKFVPQPAEELSPSSPMDAWILSRLALAAQECERGFLTRELSLVTHALHHFWLHNLCD VYLEAVKPVLWHSPRPLGPPQVLFSCADLGLRLLAPLMPFLAEELWQRLPPRPGCPPAPSISVAPYPSACSLEHW RQPELERRFSRVQEVVQVLRALRATYQLTKARPRVLLQSSEPGDQGLFEAFLEPLGTLGYCGAVGLLPPGAAAPS GWAQAPLSDTAQVYMELQGLVDPQIQLPLLAARRYKLQKQLDSLTARTPSEGEAGTQRQQKLSSLQLELSKLDKA ASHLRQLMDEPPAPGSPEL

PCT/US2003/028547

FIGURE 1997

TCCCATCTTTTCCTCGCATTTTTTCACCATCTTTCCCTCAATCTCCAGGAGCCAATGCGAGACTTTTGGCTCCGA $\verb|TTAAGCGACGGCCCGAGACTTGGGGTGCGCGAGGAGGATCGACAGAGTGGTG| \verb|ATG| GAGAGCACCCCTTCAAGGGG| \\$ ACTGAACCGAGTACACCTACAATGCAGGAATCTGCAGGAATTCTTAGGGGGCCCTGAGCCCTGGGGTATTGGACCG ATTGTATGGGCACCCTGCCACATGTCTGGCTGTCTTCAGGGAGCTCCCATCCTTGGCTAAGAACTGGGTGATGCG GATGCTCTTTCTGGAGCAGCCTTTGCCACAGGCTGCTGTAGCTCTGTGGGTAAAGAAGGAATTCAGCAAGGCTCA GGAGGAAAGTACAGGGCTGCTGAGCGGCCTCCGGATCTGGCACACCCAGCTGCTCCCAGGCGGCCTCCAGGGCCT GGTCTTGCACTTCATGGTGGGCTCCCCCAGTGCAGCTGTCAGCCAGGACTTGGCTCAGCTCCTCAGCCAGGCTGG GCTCATGAAGAGTACTGAACCTGGAGAGCCGCCCTGCATTACTTCCGCTGGCTTCCAGTTCCTGTTGCTGGACAC CCCGGCTCAGCTCTGGTACTTTATGTTGCAGTATTTGCAGACAGCCCAGAGCCGGGGCATGGACCTGGTAGAGAT TCTCTCCTTCCTCTCCAGCTCAGCTTCTCTACTCTGGGCAAGGATTACTCTGTGGAAGGTATGAGTGATTCTCT GTTGAACTTCCTGCAACATCTGCGTGAGTTTGGGCTTGTTTTCCAGAGGAAGAGGAAATCTCGGCGTTACTACCC CACACGCCTGGCCATCAATCTCTCATCAGGTGTCTCTGGAGCTGGGGGGCACTGTGCATCAGCCAGGTTTCATTGT CGTGGAAACCAATTACCGACTGTATGCCTACACGGAGTCGGAGCTGCAGATTGCCCTCATTGCCCTCTTCTCTGA GATGCTCTATCGGTTCCCCAACATGGTGGTGGCGCAGGTGACCCGGGAGAGTGTGCAGCAGCAATCGCCAGTGG GCCCCCACCATCACCGACCAGATCCGGCTCTGGGAGCTGGAAAGGGACAGACTCCGGTTCACTGAGGGTGTCCT GTATAACCAGTTCCTGTCGCAAGTGGACTTTGAGCTGCTGCTGGCCCACGCGCGGGAGCTGGGCGTGCTCGTGTT ACTCAGGTGTTTTTTTTTTTACGCGTCAGGGCTTTTCTTGTTTAATAAGTTATGATAGCT

PCT/US2003/028547

2173/6881 FIGURE 1998

MESTPSRGLNRVHLQCRNLQEFLGGLSPGVLDRLYGHPATCLAVFRELPSLAKNWVMRMLFLEQPLPQAAVALWV
KKEFSKAQEESTGLLSGLRIWHTQLLPGGLQGLILNPIFRQNLRIALLGGGKAWSDDTSQLGPDKHARDVPSLDK
YAEERWEVVLHFMVGSPSAAVSQDLAQLLSQAGLMKSTEPGEPPCITSAGFQFLLLDTPAQLWYFMLQYLQTAQS
RGMDLVEILSFLFQLSFSTLGKDYSVEGMSDSLLNFLQHLREFGLVFQRKRKSRRYYPTRLAINLSSGVSGAGGT
VHQPGFIVVETNYRLYAYTESELQIALIALFSEMLYRFPNMVVAQVTRESVQQAIASGITAQQIIHFLRTRAHPV
MLKQTPVLPPTITDQIRLWELERDRLRFTEGVLYNQFLSQVDFELLLAHARELGVLVFENSAKRLMVVTPAGHSD
VKRFWKRQKHSS

PCT/US2003/028547

FIGURE 1999A

TTAGGAAGTTATTTAACTGATCTCTGCCCTAGTTTCTTCATGTGTTAAATATGGATAGTAATAGTATCTACCTTA TGAAGTGACTGTGAAGATAAAATTATGGATTCTGTTTAAGGGTTTAGGCCAGTGTCTGGCACAGGGGAAGCATTC TAAAAATATAGCTGATGCTGTTAAACAATGACTGTTGTTGTTGTTTACTGTTATTATCCCCAAAGCGGCCCATT CTGTCTGTTGCTGTCAGCTATGACTCAGTCCCCTGATTAACTTACGCACCACCCATTTTATCCCCTGCAGAGATG CTGCCCCCACCCCTTAGGCCCGAGGGATCAGGAGCTATGGGACCAGAGGCCCTGTCATCTTTACTGCTGCT CTTGGTGGCAAGTGGAGATGCTGACATGAAGGGACATTTTGATCCTGCCAAGTGCCGCTATGCCCTGGGCATGCA GTTGGAGAGCAGTGACGGGGATGGGGCCTGGTGCCCCGCAGGGTCGGTGTTTCCCAAGGAGGAGGAGTACTTGCA GGTGGATCTACAACGACTGCACCTGGTGGCTCTGGTGGGCACCCAGGGACGGCATGCCGGGGGCCTGGGCAAGGA GTTCTCCCGGAGCTACCGGCTTACTCCCGGGATGGTCGCCGCTGGATGGCTGGAAGGACCGCTGGGGTCA GGAGGTGATCTCAGGCAATGAGGACCCTGAGGGAGTGGTGCTGAAGGACCTTGGGCCCCCCATGGTTGCCCGACT GGATGGACTCCTGTCTTACACCGCCCCTGTGGGGCAGACAATGTATTTATCTGAGGCCGTGTACCTCAACGACTC CACCTATGACGGACATACCGTGGGCGGACTGCAGTATGGGGGTCTGGGCCAGCTGGCAGATGGTGGTGGGGGCT GGATGACTTTAGGAAGAGTCAGGAGCTGCGGGTCTGGCCAGGCTATGACTATGTGGGATGGAGCAACCACAGCTT CTCCAGTGGCTATGTGGAGATGGAGTTTGAGTTTGACCGGCTGAGGGCCTTCCAGGCTATGCAGGTCCACTGTAA CAACATGCACACGCTGGGAGCCCGTCTGCCTGGCGGGGTGGAATGTCGCTTCCGGCGTGGCCCTGCCATGGCCTG GGAGGGGGAGCCCATGCGCCACAACCTAGGGGGCAACCTGGGGGACCCCAGAGCCCGGGCTGTCTCAGTGCCCCT TGGCGGCCGTGTGGCTCCTTTCTGCAGTGCCGCTTCCTCTTTGCGGGGCCCTGGTTACTCTTCAGCGAAATCTC $\verb|CTTCATCTCTGATGTGGTGAACAATTCCTCTCCGGCACTGGGAGGCACCTTCCCGCCAGCCCCCTGGTGGCCGCC| \\$ TGGCCCACCTCCCACCACTTCAGCAGCTTGGAGCTGGAGCCCAGAGGCCAGCCCGTGGCCAAGGCCGAGGG GAGCCCGACCGCCATCCTCATCGGCTGCCTGGTGGCCATCATCCTGCTCCTGCTGCTCATCATTGCCCTCATGCT $\tt CTGGCGGCTGCACTGGCGCAGGCTCCTCAGCAAGGCTGAACGGAGGGTGTTGGAAGAGGAGCTGACGGTTCACCT$ CTCTGTCCCTGGGGACACTATCCTCATCAACAACCGCCCAGGTCCTAGAGAGCCCACCCCGTACCAGGAGCCCCG GCCTCGTGGGAATCCGCCCACTCCGCTCCCTGTGTCCCCAATGGCTCTGCGTTGCTGCTCTCCAATCCAGCCTA $\verb|CCGCCTCCTTCTGGCCACTTACGCCCGTCCCCCTCGAGGCCCGGGCCCCCCACACCCGCCTGGGCCAAACCCAC|$ CAACACCCAGGCCTACAGTGGGGACTATATGGAGCCTGAGAAGCCAGGCGCCCCGCTTCTGCCCCACCTCCCCA GAACAGCGTCCCCCATTATGCCGAGGCTGACATTGTTACCCTGCAGGGCGTCACCGGGGGCAACACCTATGCTGT GCCTGCACTGCCCCAGGGGCAGTCGGGGATGGGCCCCCCAGAGTGGATTTCCCTCGATCTCGACTCCGCTTCAA GGAGAAGCTTGGCGAGGGCCAGTTTGGGGAGGTGCACCTGTGTGAGGTCGACAGCCCTCAAGATCTGGTTAGTCT TGATTTCCCCCTTAATGTGCGTAAGGGACACCCTTTGCTGGTAGCTGTCAAGATCTTACGGCCAGATGCCACAA GAATGCCAGGAATGATTTCCTGAAAGAGGTGAAGATCATGTCGAGGCTCAAGGACCCAAACATCATTCGGCTGCT GGGCGTGTGTGCAGGACGACCCCCTCTGCATGATTACTGACTACATGGAGAACGGCGACCTCAACCAGTTCCT CAGTGCCCACCAGCTGGAGGACAAGGCAGCCGAGGGGGCCCCTGGGGACGGCAGGCTGCGCAGGGGCCCACCAT CAGCTACCCAATGCTGCTGCATGTGGCAGCCCAGATCGCCTCCGGCATGCGCTATCTGGCCACACTCAACTTTGT ACATCGGGACCTGGCCACGCGGAACTGCCTAGTTGGGGAAAATTTCACCATCAAAATCGCAGACTTTGGCATGAG CCGGAACCTCTATGCTGGGGACTATTACCGTGTGCAGGGCCGGGCAGTGCTGCCCATCCGCTGGATGGCCTGGGA GTGCATCCTCATGGGGAAGTTCACGACTGCGAGTGACGTGTGGGCCTTTGGTGTGACCCTGTGGGAGGTGCTGAT GCTCTGTAGGGCCCAGCCCTTTGGGCAGCTCACCGACGAGCAGCTCATCGAGAACGCGGGGGGAGTTCTTCCGGGA GAGCCGGGAGTCTGAGCAGCGACCACCCTTTTCCCAGCTGCATCGGTTCCTGGCAGAGGATGCACTCAACACGGT GTGAATCACACATCCAGCTGCCCCTCCGTCAGGGAGCGATCCAGGGGAAGCCAGTGACACTAAAACAAGAGGACA CAATGGCACCTCTGCCCTTCCCCTCCCGACAGCCCATCACCTCTAATAGAGGCAGTGAGACTGCAGGTGGGCTGG AGAAGCCCCTGTCGCCCACCCAGCTGGTCCTGTGGATGGGATCCTCTCCACCCTCCTCTAGCCATCCCTTGGGGA AGGGTGGGGAGAAATATAGGATAGACACTGGACATGGCCCATTGGAGCACCTGGGCCCCACTGGACAACACTGAT TCCTGGAGAGGTGGCTGCCCCCAGCTTCTCTCTCTCTCACACACTGGACCCCACTGGCTGAGAATCTGGGG GTGAGGAGACAAGAAGGAGGAAAATGTTTCCTTGTGCCTGCTCCTGTACTTGTCCTCAGCTTGGGCTTCTTC

PCT/US2003/028547

2175/6881 FIGURE 1999B

CTCCTCCATCACCTGAAACACTGGACCTGGGGGTAGCCCCGCCCCAGCCCTCAGTCACCCCCACTTCCCACTTGC AGTCTTGTAGCTAGAACTTCTCTAAGCCTATACGTTTCTGTGGAGTAAATATTGGGATTGGGGGAAAGAGGGAG CAACGGCCCATAGCCTTGGGGTTGGACATCTCTAGTGTAGCTGCCACATTGATTTTCTATAATCACTTGGGGTTTGTACATTTTTTGGGGGGAGAGACACAGATTTTTACACTAATATATGGACCTAGCTTGAGGCAATTTTAATCCCCTGCACTTAGGCAGGTAATAATAAAGGTTGAGTTTTCCAC

FIGURE 2000

PCT/US2003/028547

2177/6881 FIGURE 2001

 ${\tt MMAACDPRHGRYLTVAAVFHGRISMKEVDEQMLNVQNKNSSYFVEWIPNNVKTAVCDIPPRGLKMAVTFIGNSSAIQELFKRILEQFTAMFGRKAFLHWYTGEGMD}$

PCT/US2003/028547

2178/6881 FIGURE 2002

ATGGCCCCTGCACTGCTCCTGATCCCTGCCCTCGCCTCTTTCATCCTGGCCTTTGGCACCGGAGTGGAGTTC GTGCGCTTTACCTCCCTTCGGCCACTTCTTGGAGGGATCCCGGAGTCTGGTGGTCCGGATGCCCGCCAGGGATGG CTGGCTGCCCTGCAGGACCGCAGCATCCTTGCCCCCCTGGCATGGGATCTGGGGCTCCTGCTTCTATTTGTTGGG CAGCACAGCCTCATGGCAGCTGAAAGAGTGAAGGCATGGACATCCCGGTACTTTGGGGTCCTTCAGAGGTCACTG TATGTGGCCTGCACTGCCCTGGCCTTGCAGCTGGTGATGCGGTACTGGGAGCCCATACCCAAAGGCCCTGTGTTG TGGGAGGCTCGGGCTGAGCCATGGGCCACCTGGGTGCCCCTCCTCTGCTTTGTGCTCCATGTCATCTCCTGGCTC CTCATCTTTAGCATCCTTCTCGTCTTTGACTATGCTGAGCTCATGGGCCTCAAACAGGTATACTACCATGTGCTG GGGCTGGGCGAGCCTCTGGCCCTGAAGTCTCCCCGGGCTCTCAGACTCTTCTCCCACCTGCGCCACCCAGTGTGT GTGGAGCTGCTGACAGTGCTGTGGGTGCCTACCCTGGGCACGGACCGTCTCCTTGCTTTCCTCCTTACC CACCTGCTCTCTCGGCCCCAGGATGGGGAGGCAGAGTGAGGAGCTCACTCTGGTTACAAGCCCTGTTCTTCCTCT CCCGCTGAATTCTAAATCCTTAACATCCAGGCCCTGGCTGCTTCATGCCAGAGGCCCAAATCCATGGACTGAAGG AGATGCCCCTTCTACTACTTGAGACTTTATTCTCTGGGTCCAGCTCCATACCCTAAATTCTGAGTTTCAGCCACT GAACTCCAAGGTCCACTTCTCACCAGCAAGGAAGAGTGGGGTATGGAAGTCATCTGTCCCTTCACTGTTTAGAGC ATGACACTCTCCCCTCAACAGCCTCCTGAGAAGGAAAGGATCTGCCCTGACCACTCCCCTGGCACTGTTACTTG CCTCTGCGCCTCAGGGGTCCCCTTCTGCACCGCTGGCTTCCACTCCAAGAAGGTGGACCAGGGTCTGCAAGTTCA ACGGTCATAGCTGTCCCTCCAGGCCCCAACCTTGCCTCACCACTCCCGGCCCTAGTCTCTGCACCTCCTTAGGCC $\tt CTGCCTCTGGGCTCAGACCCCAACCTAGTCAAGGGGATTCTCCTGCTCTTAACTCGATGACTTGGGGCTCCCTGC$ TCTCCCGAGGAAGATGCTCTGCAGGAAAATAAAAGTCAGCCTTTTTCTAC

PCT/US2003/028547

2179/6881 FIGURE 2003

MAPALLLIPAALASFILAFGTGVEFVRFTSLRPLLGGIPESGGPDARQGWLAALQDRSILAPLAWDLGLLLLFVG QHSLMAAERVKAWTSRYFGVLQRSLYVACTALALQLVMRYWEPIPKGPVLWEARAEPWATWVPLLCFVLHVISWL LIFSILLVFDYAELMGLKQVYYHVLGLGEPLALKSPRALRLFSHLRHPVCVELLTVLWVVPTLGTDRLLLAFLLT LYLGLAHGLDQQDLRYLRAQLQRKLHLLSRPQDGEAE

PCT/US2003/028547

2180/6881 FIGURE 2004A

TCTGGACGCCCGGCTCCTCCGCACCCCCTCCCCCGGGGGTCCCGCGGCCTGTGAGTTGACTGAGGGGGCTCAGACT TGGGGAGTGGGTGTCTCCTCGCCCCTGTCCTTGCTCCCGTCCCTGGCCCGGACCTTGGCTGTCTCCTCTTTGTGC GGGCGCAGGACTTGCAGGCGCCGGGGAGAAGAGACATGGAGCCGGCCCTTGGCACTCTGGGGTCGCGTGGGGCAG TCGGTGGGGGAGGCAGGCGGTGACAGGACAGGGTGGGGGTGGACGCCAGGGTTCTGGGAACGCGCTGGCAGC CCTGACGCCCGGGTTCCGAAAGTCTCGGGGGTGGGTATTTCCCCCGACCCGCCTCGGGGGCGGAGTGCGGGGCAG GACGCGCCGGCTGCTGCCGCCCCCTCTTTCCCCTCTTCCCTGGTTTCCCTTCTCTCTAGACCTGTTCGCTC TCCGCCCCTCCTTGCCTCCCCAACACCCCCTCAGGTCCCGTTGCCTCCTGGTCCTTTCAGGGATTCCTGGTCCTT CCTTCCCACACTAGCCTCCCTGGGGTATCGCTGAGGCAGCCTGGCCTGCACCCAGGTTCCCCTCACCCCTGCCAC AATACGCATTAACCCTGTGCTGCCACATCTGGCTCCTGCCCTCATTGCCTCCAATCCGGACTCTTCCTCACAT CACCCCCACCCCCAACTTGGGCTCACAACTTCTCTTCACTTTTTCCATTTCCCCAGTTCTCTGCCTTCCGTC TTTCCCTCTGTCCTCATCCTTAGCCCCTCTGCCCTGCTTTGTGTCCCACCTCTCCCCCCCTCCACTTCCTCCCCC ${\tt AGGCGTCCGTTCGAGGCCGAGAGAAGCAGAACGGGAGCGCCTGTCCCAGATGCCAGCCTGGAAACGAGGGCTCC}$ TGGAGCGCCGCCGGGCCAAGCTTGGGCTGTCCCCTGGGGAGCCTAGCCCTGTGCTAGGGACTGTAGAGGCTGGAC CTCCAGACCCGGATGAGTCTGCGGTCCTTCTGGAGGCCATCGGGCCAGTGCACCAGAACCGATTCATCCGGCAGG AGCGGCAGCAGCAGCAGCAACAACAACGGAGTGAAGAGCTGCTAGCAGAGAAAAGCCTGGGCCTCTGGAGG CTCGGGACTGGAGGCAAAGCCCAGGAGAGGTGGGAGACAGGAGCTCCCGACTGTCAGAGGCATGGAAATGGAGGC TGAGTCCTGGAGAAACTCCAGAGCGGAGTCTGAGACTAGCAGAGTCTCGAGAGCAAAGCCCCAGGAGAAAAGAGG TGGAAAGTAGACTGAGCCCAGGGGAATCTGCCTACCAGAAGTTGGGCCTGACAGAGGCCCCATAAATGGAGACCTG ACTCCAGAGAGTCTCAGGAACAGAGTTTGGTACAACTGGAGGCAACAGAGTGGAGGCTGAGGTCAGGAGAAAAA GACAAGACTACTCGGAAGAATGTGGGAGAAAAGAAGAGTGGCCAGTTCCAGGGGTAGCTCCAAAAGAGACTGCAG AGCTGTCCGAGACCCTGACAAGGGAGGCCCAAGGCAACAGTTCCGCAGGAGTGGAGGCAGCAGAGCAGAGCCTG TGGAAGATGGCGAGAGGGGCATGAAGCCAACAGAAGGGTGGAAATGGACCCTGAACTCCGGGAAGGCTCGAGAAT GGACACCCAGGGACATAGAGGCTCAAACTCAGAAACTAGAACCTCCAGAGTCAGCAGAAAGCTTCTGGAATCTC CCGGTGTGGAGGCTGGAGAAGGGGGGCTGAGAAGGAGGAGGCGGGGGCTCAGGGCAGGCCTCTGAGAGCCCTGC AGAACTGCTGCTCTGTGCCCTCCCCCCCCCCACCAGAGGACGGCTGGGAGGGCCTGAGACAGCAGGAAGAGG AAGCAGTGGAGCTCCAGCCCCCACCACCACCCCTCTGTCTCCCCCCACCCCCAGCCCCAACTGCCCCCAACCTC GACACACCTTCACCGTCAACCCCCGGCGGTCTGTGCCCCCTGCGACCCCAGCCACCCCAACCTCTCCAGCCACAG TTGATGCTGCAGTCCCGGGGGCTGGGAAGAAGCGGTACCCAACTGCCGAGGAGATCTTGGTTCTGGGGGGGCTACC TCCGTCTCAGCCGCAGCTGCCTTGCCAAGGGGTCCCCCGAAAGACACCCACAAACAGCTTAAGATCTCCTTCAGCG AGACAGCCCTGGAGACCACGTACCAATACCCCTCCGAGAGTTCGGTACTGGAGGAGCTGGGCCCGGAGCCTGAGG TCCCCAGTGCCCCAACCCTCCAGCAGCCCAACCCGACGACGAAGAGGATGAGGAAGAGCTGCTGCTGCAGC ATGAGCCTGGCAGGGAAGGGCAACCAACATCTTGTAACTTGCTTTCCCCACCCTGTTTCTGGGGGCAGAGCCAAT AGAGTGAGCGCCAAGTCCTGAGAAGGGGCACAGAACTCCCTGGAGGGTGGAGATGGAGCACCTGCCCCCATGGC AGGGTACACTCTCCCCACAGCCTTCCTCCCCACCATCCCGTGGGGACTCTCGGGATTTAAGCACTCGTCTCTCTG GGAGGCCCAGACCCCACTCCATTTATAGGCACATCTCCTTCATTTCCTAGGTCACTGCCCCTTTGTTTACAGCTC

PCT/US2003/028547

FIGURE 2004B

PCT/US2003/028547

2182/6881 FIGURE 2005

MATIPDWKLQLLARRRQEEASVRGREKAERERLSQMPAWKRGLLERRRAKLGLSPGEPSPVLGTVEAGPPDPDES AVLLEAIGPVHQNRFIRQERQQQQQQQQRSEELLAERKPGPLEARERRPSPGEMRDQSPKGRESREERLSPRETR ERRLGIGGAQELSLRPLEARDWRQSPGEVGDRSSRLSEAWKWRLSPGETPERSLRLAESREQSPRRKEVESRLSP GESAYQKLGLTEAHKWRPDSRESQEQSLVQLEATEWRLRSGEERQDYSEECGRKEEWPVPGVAPKETAELSETLT REAQGNSSAGVEAAEQRPVEDGERGMKPTEGWKWTLNSGKAREWTPRDIEAQTQKLEPPESAEKLLESPGVEAGE GEAEKEEAGAQGRPLRALQNCCSVPSPLPPEDAGTGGLRQQEEEAVELQPPPPAPLSPPPPAPTAPQPPGDPLMS RLFYGVKAGPGVGAPRRSGHTFTVNPRRSVPPATPATPTSPATVDAAVPGAGKKRYPTAEEILVLGGYLRLSRSC LAKGSPERHHKQLKISFSETALETTYQYPSESSVLEELGPEPEVPSAPNPPAAQPDDEEDEELLLLQPELQGGL RTKALIVDESCRR

PCT/US2003/028547

2183/6881 FIGURE 2006A

CCCACCTATCTTGCCCACCCCACCACCCCACGCTGCTTGGGACTTGAAATCTGTGGCCGAAGGACCGTCACTACA TATTTTTTTCCTCCAAAATTTTACCCCCTCCCCCTGAGCCCGAGGTGCTGACGTCGCAAAAAAATTGGATAAA ACCACCATCATGGGTTCGGGTCCCATAGACCCCAAAGAACTTCTCAAGGGCCTGGACAGCTTCCTTAACCGAGAT TGCACTTACTTGAACATTCTCCTGCAGACCCGTTCACCAGAAATATTGGTCAAATTTATTGACGTTGGCGGCTAC CTGCAGCATCTACCGCTCACTGTAGACCATCTCAAGCAGCAACAACACCAGCTAAACTGGTGAAGCAGCTGAGCAAG TCAAGTGAGGATGAAGAGCTCCGGAAATTGGCCTCAGTCCTTGTCAGCGACTGGATGGCTGTCATCCGCTCTCAG AGCAGTACCCAGCCTGCTGAGAAAGATAAGAAGAAACGTAAAGATGAAGGAAAAAGTCGAACTACCCTTCCTGAG CGACCTTTGACAGAGGTGAAGGCTGAGACCCGGGCTGAGGAGGCCCCAGAGAAGAAGAGGGGAGAAGCCCAAGTCT CTTCGCACCACGCACCCAGTCATGCCAAGTTCCGTTCCACTGGACTAGAGCTGGAGACACCATCCTTGGTGCCT GTGAAGAAGAATGCCAGCACAGTGGTGGTTTCTGACAAGTACAACCTTAAACCCATCCCCTCAAACGTCAGAGC AACGTAGCTCCCAGGAGATGCCACTCCCCCTGCAGAGAAATACAAGCCACTCAACACACCACACTAATGCC ACCAAAGAGATCAAAGTGAAGATCATCCCGCCACAGCCTATGGAGGGCCTGGGCTTTCTGGATGCTCTTAATTCA GCCCCTGTTCCAGGCATCAAAATTAAGAAGAAAAAAAAGTACTGTCACCTACGGCTGCCAAGCCAAGCCCTTT GAAGGGAAAACGAGCACAGAACCAAGCACAAACCTTCTTCCCCAGAACCAGCACCACCTTCTGAGGCAATG GACGCAGACCGTCCAGGCACCCCGGTTCCCCCTGTTGAAGTCCCGGAGCTCATGGATACAGCCTCTTTGGAGCCA GGAGCTCTGGATGCCAAGCCAGTGGAGAGTCCTGGAGATCCTAACCAACTGACCCGGAAAGGCAGGAAGAGAAAA AGTGTGACATGGCCTGAGGAAGGCAAACTGAGAGAATATTTCTATTTTGAATTGGATGAAACTGAACGAGTAAAT GTGAATAAGATCAAGGACTTTGGTGAGGCCGCTAAGCGAGAGATACTGTCAGACCGACATGCATTTGAGACAGCG CGGCGTCTGAGCCATGATAACATGGAGGAGAAGGTGCCCTGGGTGTGCCCCCGGCCCCTGGTTCTGCCCTCACCT CTTGTCACCCCTGGAAGCAATAGTCAGGAGCGATATATCCAGGCTGAGCGGGAGAAGGGAATCCTTCAGGAGCTC TTCCTGAACAAGGAGAGTCCTCATGAGCCTGATCCTGAGCCCTACGAGCCCATACCCCCTAAACTCATCCCCCTA GATGAGGAGTGTTCCATGGATGAGACTCCGTATGTTGAGACTCTGGAACCTGGGGGGGTCAGGTGGCTCACCTGAT GGGGCAGGAGGCTCCAAGTTGCCTCCAGTTCTGGCCAATCTTATGGGAAGCATGGGTGCTGGAAAGGGCCCCCAA GGCCCTGGAGGAGGAGGCATTAATGTCCAAGAGATCCTCACCTCCATCATGGGTAGCCCAAACAGTCATCCTTCA GAGGAACTACTGAAACAACCAGACTATTCGGACAAGATCAAGCAGATGCTGGTGCCACATGGACTCCTAGGCCCT GGCCCAATAGCCAATGGTTTCCCACCAGGGGGTCCTGGGGGCCCCCAAGGGCATGCAGCACTTTCCCCCTGGACCT GGGGGACCTATGCCAGGTCCCCATGGAGGCCCTGGTGGGCCAGTGGGTCCACGTCTTCTGGGTCCTCCACCCCCT CCCCGGGGAGGTGATCCCTTCTGGGATGGCCCGGCCGACCCTATGCGGGGTGGCCCAATGCGGGGGGGTCCAGGA CCAGGTCCTGGACCATACCATAGAGGCCGAGGTGGCCGAGGAGGAAACGAACCTCCTCCTCCTCCTCCATTC CGAGGCGCCAGAGGAGGTCGCTCTGGAGGAGGACCCCCAAATGGACGAGGGGGCCCTGGTGGGGGCATGGTTGGA GGTGGTGGGCATCGTCCTCACGAAGGCCCTGGTGGGGGCATGGGCAACAGCAGTGGACATCGTCCCCACGAAGGC CGTCCCCACGAAGGCCCTGGCGGTGGCATCAGTGGTGGCAGTGGCCATCGTCCCCATGAAGGCCCTGGCGGAGGA CATGAAGGCCCTGGACACGGGGGGCCCCATGGCCACCGGCCTCATGATGTCCCTGGTCACCGAGGCCATGACCAT GGAGGCCACAGCCATGGAGGAGACATGTCAAACCGCCCTGTCTGCCGACATTTCATGATGAAGGGCAACTGCCGC GTTCACACACCCTGTGGACTGCAGCCTCGCTCTTTCCACCCTGTTATGGCTTCTGTGAGGCCCATTTTCCCTT

PCT/US2003/028547

2184/6881 FIGURE 2006B

PCT/US2003/028547

2185/6881 FIGURE 2007

AACCCAAGCGGGACAAGGACTTTTGGGGGGGGGGTCAAAGGGCACGAAGTTGTGCCTACAGCTGTTACCATAGTAA CCGAGGACCGGATGTGGCGATCTTGGCGGTGCGACAGTCCTCTTCTCAGGCCCTCTGGCCCGAGAGCCTGTTGAC TCTGTGACACACTCTGAGGAGCTGGTTGTGGTGTTTTCCAGCGAGGGAAGAAAAGAGTAATTTTTTCAAAGCATT ${\tt TATAGAAACGCAGCAAAGGGAAGGTGTGAGGTTGCCGCC} \underline{{\tt ATG}} {\tt CCTGGCAGAACGGAGGGAGGCAGTTGGCTCCGG}$ AATGCGGCCGCAGATGTTCTCCGCAACCTTCCGGAAGTGGAATGGCGGGAGCCTCAGCATTGCTGCCCACCG ACCCCCGGAAGCGGAAACAGAATCCCCGCGTGCCCCTTCCTCACTACCCTCCAAATCCCGCTGCAGCCATTGCC GCAGACACGATGCCGAAACGAAAGAAGCAGAATCATCACCAGCCACCGACACAGCAGCAGCCCCCGCTGCCCGAG CGGGAAGAGACTGGAGATGAGGAGGATGGGAGTCCCATCGGACCACCCAGCCTTCTGGGCCCTCCCCCATGGCC AATGGAAAACCTGGCGACCCTAAGTCAGCTCTTCACAGAGGTCCTCCAGGATCAAGGGGACCACTGATTCCACCA $\tt CTGCTGAGTCTCCCACCTCCTTGGGGTAGAGGCCCAATTCGGAGAGGGCTTGGCCCCAGGTCTAGCCCATAT$ GGTCGTGGTTGGTGGGGAGTCAATGCAGAACCTCCTTTTCCGGGGCCAGGCCATGGGGGTCCCACCAGGGGAAGC GACCCCCAGGTTATGGAAGACAAATCCGACCGCCCTGTCTGCCGACATTTTGCCAAAAAGGGCCACTGTCGATAT ${\tt GAGGACCTCTGTGCCTTCTACCATCCAGGCGTCAATGGACCTCCTCTG} \underline{{\tt TGA}}{\tt GACTGTGCCTTCCCATCCAGGCTG}$ GAAGGAGCTCTCTGTGACCTAGCGGCCATTTATTTCTCTGTAGCCCTATGATGGCTACTGTGAGGCTCTTCTAAC ACCCTCAGTCAGTGACACCCCATCCCATCCACCACTTCCCCGTGTGGGGTCCAGAGTGGTGTTGCATCACTGG TGCGCGGCATACGCGCTTTCTTCTGATCCAGCCTGTAGAGACTCGCCTTTGGGACCCATCTTTGCTTCCTTTCAG TTGCCTCCTGGATCTTCTTTCCCGTCATCAAATGACTGCTGAACAGGAAACCTCTTTGGTGCTGTTTCTTGTGCA TCTGTCCACCTGTTCCCCAGTATTGCCCTCAATTCCTGAGAGCCCTGGAGCGGTTTCCTACCATTCCCTTCTTTT AGCTGCTTGTTTTAAGTCCTTTTTATGTGACATTCCCTACCCCCAATGTTGTCAGCTGCTTGTGAAACTCAGCCA GGTTGTCTAACCTGGGGTCAAGTTTGGGTGACTGGTGCAGAGTTACTTCCTAAAAGGCCACTCTCCCTGCCTTTG TGTGCATCCCCTTGTAGCCTTTCTCAGTGTCCGTGGCATTTTTGTGACTTCCCAGCACTAGAATAAGTTTTCCTG CCAAAATGAGTGAGGCGCTTGGTGCCCTCTGGACTTTCCCACTTCCCAACATGGGAGAATTGTGAACTTTCCATC AGACTGCCTCCCTGGCCCTCCCCATTCTTCTCTGTTGGTTATTCTGAGTCTGACACAGACCCATGACATGTCTT ATAAAGCCTCCAATGGCTTTATCCTACCTAGATCCCTTCCAGCCCATTTTAATTAGACTATGTCATTGTGAGGCC ACCAGTCCATTCATTTGAATTCTGTGAATCTCCACCTTGCCTATCTTTGGGTAGAAGCTGGACAGTACTGTTGCC CTCTTCCAATCCTCTCCCCTACATCCCTGGCACTGGTTGTTTTCTGTGAAAACAGCAGTGAACAGGTTCAGTTT ATGAGGTTTTTTTTTTTTTTTTTTTTAACTTTTTTATATTAGTAATAATGCAGTGGAAACCAGCATTTTAT TTAAAAAAAAA

PCT/US2003/028547

2186/6881 FIGURE 2008

MPGRTEGGSWLRNAAAADVLRNLPEVEWREPQHCCPPTPRKRKQNPRVPLPHYPPNPAAAIAADTMPKRKKQNHH QPPTQQQPPLPEREETGDEEDGSPIGPPSLLGPPPMANGKPGDPKSALHRGPPGSRGPLIPPLLSLPPPPWGRGP IRRGLGPRSSPYGRGWWGVNAEPPFPGPGHGGPTRGSFHKEQRNPRRLKSWSLIKNTCPPKDDPQVMEDKSDRPV CRHFAKKGHCRYEDLCAFYHPGVNGPPL

PCT/US2003/028547

2187/6881 FIGURE 2009

GGGAGCTCGGCGGAGGGCCGGCCAGGTGACTGGTCCGGGCCATGCCGAGGAAGAAGCCATTCAGCGTGAAGCAGA AGAAGAAGCAGTTGCAGGACAAACGGGAGCGGAAGAGAGGGCTTCAAGATGGGCTGCGCTCCAGTTCCAACAGCC GCAGCGGGAGCCGGGAGCGGCGAGACAGACCGACACCTCGGACGGGGAGTCTGTGACCCATCATATCCGCA GGCTTAACCAGCAGCCTTCTCAGGGGCTGGGTCCACGAGGCTACGACCCAAATCGATACCGACTGCATTTTGAGA TGTTGGAGCTGGACATCCGGGAGGTGTATCAGCCTGGCTCAGTTCTGGACTTTCCTCGACGTCCTCGTTGGAGCT ATGAGATGTCCAAGGAGCAACTAATGAGCCAAGAGGAACGGAGCTTCCAAGACTATCTTGGGAAGATTCATGGGG CTTACTCCTCTGAGAAACTCAGCTACTTTGAGCACAATCTGGAGACATGGAGGCAGCTGTGGCGGGTGTTAGAGA TGTCTGACATCGTCCTGCTTATCACTGATATCCGACATCCAGTTGTGAATTTCCCGCCAGCACTTTATGAGTATG TGACTGGAGAACTTGGACTGGCCCTGGTGCTGGTTTTGAACAAGGTGGATCTGGCCCCGCCAGCTCTTGTGGTTG CCTGGAAGCATTATTTCCATCAACACTATCCCCAGCTCCACGTCGTCCTTTTCACCTCTTTTCCTCGGGACCCCC GCACCCCACAGGATCCTAGTAGTGTCTTGAAGAAGAGTCGGAGGCGGGGGAGAGGATGGACTCGGGCCCTGGGGC CAGAGCAGTTGCTGAGAGCCTGTGAAGCCATCACTGTGGGGAAAGTGGACTTGAGCAGCTGGCGGGAGAAGATTG CTCGGGATGTGGCTGGGGCCACCTGGGGTAATGGCTCTGGGGAGGAGGAGGAAGAGGAGGATGGCCCAGCAGTCC TGGTGGAGCAGACTGATTCAGCAATGGAGCCAACTGGCCCAACCCAAGAGCGCTACAAGGATGGGGTGGTGA CCATCGGCTGTGTGGGTTTCCCTAATGTGGGAAAGTCCTCGCTGATCAATGGGCTGGTGGGGGGAAAGTCGTGA GTGTCTCCAGAACCCCGGGCCATACCCGATACTTTCAGACCTACTTTCTTACCCCCTCTGTGAAGCTCTGTGACT GCCCAGGCCTCATCTTCCCATCTTCTGCCTAGGCAGTTGCAGGTTCTGGCAGGGATCTACCCTATCGCCCAGA TCCAGGAGCCCTACACTGCTGTGGGCTACCTGGCCTCCCGAATTCCCGTGCAGGCCCTGCTCCACCTGCGCCACC CAGAGGCTGAGGACCCCTCAGCGGAACACCCCTGGTGTGCCTGGGACATCTGTGAAGCCTGGGCAGAGAAACGTG GTTACAAGACAGCCAAGGCGGCTCGGAATGATGTGTACAGAGCAGCCAACAGTCTCTTGCGGCTGGCAGTGGACG GCCGCCTCAGCCTGTGTTTTCATCCCCCAGGCTACAGTGAACAGAAAGGCACCTGGGAGTCCCATCCAGAGACCA CGGAGCTGGTGGTTTTGCAGGGCAGGGTGGGGCCAGCAGGTGACGAGGAGGAGGAGGAAGAGAGCTGAGCA GCTCCTGTGAGGAGGAGGAGGAGGAGGACCCGGATGCGGATGAGGAGGAGAGGGGATGAGGAGACCCCAACCT CGGCTCCAGGGTCCAGCCTGGCCGAAACCCTTATGCCCTGCTGGGTGAGGATGAGTGCTGAGTTCCTCGCC CAGCGCCATCTTCCCTCCCAGTATCTTTGCTTTTGGACTGACCTGGGGGGTATCTCCCCTCTGCCACCCCAATTGT GAATAAAGATTGTTTGCTTTGTAGCCCCTTCCCCAGATGAACTGAGGTGAGAGCGGCTGTTCCAGGCTAACAGCT GTGGGAGGCTTCTCTCTCTCTCTCTCTTTTTT

PCT/US2003/028547

FIGURE 2010

MPRKKPFSVKQKKKQLQDKRERKRGLQDGLRSSSNSRSGSRERREEQTDTSDGESVTHHIRRLNQQPSQGLGPRG
YDPNRYRLHFERDSREEVERRKRAAREQVLQPVSAELLELDIREVYQPGSVLDFPRRPPWSYEMSKEQLMSQEER
SFQDYLGKIHGAYSSEKLSYFEHNLETWRQLWRVLEMSDIVLLITDIRHPVVNFPPALYEYVTGELGLALVLVLN
KVDLAPPALVVAWKHYFHQHYPQLHVVLFTSFPRDPRTPQDPSSVLKKSRRRGRGWTRALGPEQLLRACEAITVG
KVDLSSWREKIARDVAGATWGNGSGEEEEEEDGPAVLVEQQTDSAMEPTGPTQERYKDGVVTIGCVGFPNVGKSS
LINGLVGRKVVSVSRTPGHTRYFQTYFLTPSVKLCDCPGLIFPSLLPRQLQVLAGIYPIAQIQEPYTAVGYLASR
IPVQALLHLRHPEAEDPSAEHPWCAWDICEAWAEKRGYKTAKAARNDVYRAANSLLRLAVDGRLSLCFHPPGYSE
QKGTWESHPETTELVVLQGRVGPAGDEEEEEEELSSSCEEEGEEDRDADEEGEGDEETPTSAPGSSLAGRNPYA
LLGEDEC

PCT/US2003/028547

FIGURE 2011

GTGGACGACACCCAGTTCGTGCGCTTCGACAACGACGCCGCGAGTCCGAGGATGGTGCCGCGGGCGCCCGTGGATG GAGCAGGAGGGTCAGAGTATTGGGACCGGGAGACACGGAGCGCCAGGGACACCGCACAGATTTTCCGAGTGAAC CTGCGGACGCTGCGCGGCTACTACAATCAGAGCGAGGCCGGGTCTCACACCCTGCAGTGGATGCATGGCTGCGAG $\tt CTGGGGCCCGACAGGCGTTCCTCCGCGGGTATGAACAGTTCGCCTACGACGGCAAGGATTATCTCACCCTGAAT$ GAGGACCTGCGCTCCTGGACCGCGGTGGACACGGCGGCTCAGATCTCCGAGCAAAAGTCAAATGATGCCTCTGAG GCGGAGCACCAGAGAGCCTACCTGGAAGACACATGCGTGGAGTGGCTCCACAAATACCTGGAGAAGGGGAAGGAG ACGCTGCTTCACCTGGAGCCCCCAAAGACACACGTGACTCACCACCCCATCTCTGACCATGAGGCCACCCTGAGG TGCTGGGCCCTGGGCTTCTACCCTGCGGAGATCACACTGACCTGGCAGCAGGATGGGGAGGGCCATACCCAGGAC ACGGAGCTCGTGGAGACCAGGCCTGCAGGGGATGGAACCTTCCAGAAGTGGGCAGCTGTGGTGCCTTCTGGA GAGGAGCAGAGATACACGTGCCATGTGCAGCATGAGGGGGCTACCCGAGCCCGTCACCCTGAGATGGAAGCCGGCT TCCCAGCCCACCATCCCCATCGTGGGCATCATTGCTGGCCTGGTTCTCCTTGGATCTGTGGTCTCTGGAGCTGTG GTTGCTGCTGTGATATGGAGGAAGAAGAGCTCAGGTGGAAAAGGAGGAGCTACTCTAAGGCTGAGTGGAGCGAC ${\tt AGTGCCCAGGGGTCTGAGTCTCACAGCTTG} \underline{{\tt TAA}} {\tt AGCCTGAGACAGCTGCCTTGTGTGCGACTGAGATGCACAGCT}$ GCCTTGTGTGCGACTGAGATGCAGGATTTCCTCACGCCTCCCCTATGTGTCTTAGGGGACTCTGGCTTCTCTTTT TGCAAGGGCCTCTGAATCTGTCTGTGTCCCTGTTAGCACAATGTGAGGAGGTAGAGAAACAGTCCACCTCTGTGT CAGAGTGCGGCAGCTCATGCCTGTAATCCCAGCACTTAGGGAGGCCGAGGAGGGCAGATCACGAGGTCAGGAGAT CGAAACCATCCTGGCTAACACGGTGAAACCCCGTCTCTACTAAAAAATACAAAAAATTAGCTGGGCGCAGAGGCA CGGGCCTGTAGTCCCAGCTACTCAGGAGGCGGAGGCAGGAGAATGGCGTCAACCCGGGAGGCGGAGGTTGCAGTG AGCCAGGATTGTGCGACTGCACTCCAGCCTGGGTGACAGGGTGAAACGCCATCTCAAAAAATAAAAATTAAAAAA TAAAAAAAGAACC

PCT/US2003/028547

2190/6881 FIGURE 2012

MVDGTLLLLSEALALTQTWAGSHSLKYFHTSVSRPGRGEPRFISVGYVDDTQFVRFDNDAASPRMVPRAPWMEQ EGSEYWDRETRSARDTAQIFRVNLRTLRGYYNQSEAGSHTLQWMHGCELGPDRRFLRGYEQFAYDGKDYLTLNED LRSWTAVDTAAQISEQKSNDASEAEHQRAYLEDTCVEWLHKYLEKGKETLLHLEPPKTHVTHHPISDHEATLRCW ALGFYPAEITLTWQQDGEGHTQDTELVETRPAGDGTFQKWAAVVVPSGEEQRYTCHVQHEGLPEPVTLRWKPASQ PTIPIVGIIAGLVLLGSVVSGAVVAAVIWRKKSSGGKGGSYSKAEWSDSAQGSESHSL

WO 2004/030615 PCT/US2003/028547

FIGURE 2013

CCTGAGTCAGACGGCATGGAGACGCTTCTGGAAGGAACACCGCAATGGCTGCGCAGGGACAGCCCCAGGTCCAG
TTCAAACTTGTATTGGTTGGTGATGGTGGTACTGGAAAAACGACTTTCGTGAAACATCATTTGACTGGTGAATTT
GAGAAGAAGTATGTAGCCACCTTGGGTGTTGAGGTTCATCCCCTAGTGTTCCATACCAACAGAGGACCTGTTAAG
TTCAATGTATGGGACACAGCCGGCCTGGAGAAATTCAGTGGACTGAGAGATGGCTATTATATCCAAGCCCAGAGT
ACCATCATAGTGTTTGATGTAACATCGAGAGTTACTTACAAGAATGTGCCTAACTGGCATAGAGATCTGGTATGA
GTGTGTGAAAACACCCCCACTGTGTTGAGTGGCAACAAAGTGGATATTAAGGACAGGAAAGTGAAGGCGAAATCC
ATTGTCTTCCACCGAAAGAAGAATCTTCAGTACTACGACATTTCTGCCAAAAGTAACTATAACTTTGAAAAGCCC
TTCCTCTGGCTTGCTAGGAAGCTCATTGGAGACCCTAACTTGGAATTTGTTGCCATGCCTGCTCTCGCCCCACCA
GAAGTTGTCATGGACCCAGCTTTGGCAGCACAGTATGAGCACACTTAGAGGTTGCTCAGACAACTGCTCTCCCG
GACGAGGATGATGACCTGTGAAAACACTGCACCACTATTTTATATCTAGCTAAGCGGAACATGTGCTTCATCTGTGGGATG
CTGAAGGAGATGAGGGGCTTCGCAGTGAATGTGGCAGTTCAAAAAAATACCTTCATTGTTTGGACCTGCATATTT
AGCTGTTTTGGAACACAGTTGATTCCTTTGAGTTTCAAATATAGACTGCTACCAGCACAATATTCAACTTT

PCT/US2003/028547

2192/6881 FIGURE 2014

 ${\tt MAAQGQPQVQFKLVLVGDGGTGKTTFVKHHLTGEFEKKYVATLGVEVHPLVFHTNRGPVKFNVWDTAGLEKFSGL} \\ RDGYYIQAQSTIIVFDVTSRVTYKNVPNWHRDLVEVCENTPTVLSGNKVDIKDRKVKAKSIVFHRKKNLQYYDIS \\ AKSNYNFEKPFLWLARKLIGDPNLEFVAMPALAPPEVVMDPALAAQYEHDLEVAQTTALPDEDDDL$

PCT/US2003/028547

FIGURE 2015

GGAGACGCTTCTGGAAGGAACACCGCAATGGCTGCGCAGGGACAGCCCCAGGTCCAGTTCAAACTTGTATTGGTT
GGTGATGGTGGTACTGGAAAAACGACTTTCGTGAAACATCATTTGACTGGTGAATTTGAGAAGAAGTATGTAGCC
ACCTTGGGTGTTGAGGTTCATCCCCTAGTGTTCCATACCAACAGAGGACCTGTTAAGTTCAATGTATGGGACACA
GCCGGCCTGGAGAAATTCAGTGGACTGAGAGATGGCTATTATATCCAAGCCCAGAGTACCATCATAGTGTTTGAT
GTAACATCGAGAGTTACTTACAAGAATGTGCCTAACTGGCATAGAGATCTGGTATGAGTGTGTGAAAACACCCCC
ACTGTGTTGAGTGGCAACAAAGTGGATATTAAGGACAGGAAAGTGAAGGCGAAATCCATTGTCTTCCACCGAAAG
AAGAATCTTCAGTACTACGACATTTCTGCCAAAAGTAACTATAACTTTGTTGTTGCCATGCCTGCTCTCGCCCCA
CCAGAAGTTGTCATGGACCCAGCTTTGGCAGCACAGTATGAGCACGACTTAGAGGTTGCTCAGACAACTGCTCTC
CCGGACGAGGATGATGACCTGTGAGAATGAAGCTCGAGCAGAGTCTAGTTTTATAGGCAGCTGTCC
TGTGA

PCT/US2003/028547

FIGURE 2016

CCCCAGACGCCGAGGATGGCCGTCATGGCGCCCCGAACCCTCCTCCTGCTACTCTCGGGGGCCCTGGCCCTGACC CCGCGGGCGCCGTGGATAGAGCAGGAGGGCCCGAGTATTGGGACCAGGAGACACGGAATGTGAAGGCCCAGTCA CAGACTGACCGAGTGGACCTGGGGGACCCTGCGCGGCTACTACAACCAGAGCGAGGCCGGTTCTCACACCATCCAG ATAATGTATGGCTGCGACGTGGGGTCGGACGGCGCTTCCTCCGCGGGTACCGGCAGGACGCCTACGACGGCAAG GATTACATCGCCCTGAACGAGGACCTGCGCTCTTGGACCGCGGCGGACATGGCGGCTCAGATCACCAAGCGCAAG CATGAGGCCACCCTGAGGTGCTGGGCCCTGGGCTTCTACCCTGCGGAGATCACACTGACCTGGCAGCGGGATGGG GAGGACCAGACCCAGGACACGGAGCTCGTGGAGACCAGGCCTGCAGGGGATGGAACCTTCCAGAAGTGGGCGGCT GTGGTGGTGCCTTCTGGAGAGGAGCAGAGATACACCTGCCATGTGCAGCATGAGGGTCTGCCCAAGCCCCTCACC CTGAGATGGGAGCTGTCTTCCCAGCCCACCATCCCCATCGTGGGCATCATTGCTGGCCTGGTTCTCCTTGGAGCT GTGATCACTGGAGCTGTGGTCGCTGCCGTGATGTGGAGGAGGAGAGAGCTCAGATAGAAAAGGAGGAGTTACACT CAGGCTGCAAGCAGTGACAGTGCCCAGGGCTCTGATGTCCCTCACAGCTTGTAAAGTGTGAGACAGCTGCCTT GTGTGGGACTGAGAGGCAAGAGTTGTTCCTGCCCTTCCCTTTGTGACTTGAAGAACCCTGACTTTGTTTCTGCAA AGGCACCTGCATGTGTCTGTGTTAGGCATAATGTGAGGAGGTGGGGAGACCACCCCACCCCATGTCCAC CATGACCCTCTTCCCACGCTGACCTGTGCTCCCTCCCCAATCATCTTTCCTGTTCCAGAGAGGTGGGGCTGAGGT GAGACAAAATAAATGGAAGACATGAGAAC

PCT/US2003/028547

2195/6881 FIGURE 2017

TTGAGGTATTTCAGCACCGCTGTGTCGCGGCCCGGCCGGGGAGCCCCGCTACATCGCCGTGGAGTACGTAGAC GAGGGGCCGCAGTATTGGGAGTGGACCACAGGGTACGCCAAGGCCAACGCACAGACTGACCGAGTGGCCCTGAGG CCCGACGGACGCCTCCTCCGCGGGTATCACCAGCACGCGTACGACGGCAAGGATTACATCTCCCTGAACGAGGAC CTGCGCTCCTGGACCGCGGGGACACCGTGGCTCAGATCACCCAGCGCTTCTATGAGGCAGAGGAATATGCAGAG GAGTTCAGGACCTACCTGGAGGGCGAGTGCCTGGAGTTGCTCCGCAGATACTTGGAGAATGGGAAGGAGACGCTA CAGCGCGCAGATCCTCCAAAGGCACACGTTGCCCACCCCATCTCTGACCATGAGGCCACCCTGAGGTGCTGG GCCCTGGGCTTCTACCCTGCGGAGATCACGCTGACCTGGCAGCGGGATGGGGAGGAACAGACCCAGGACACAGAC CTTGTGGAGACCAGGCCTGCAGGGGATGGAACCTTCCAGAAGTGGGCCGCTGTGGTGGTGCCTTCTGGAGAGGAA CAGAGATACACATGCCATGTGCAGCACGAGGGGCTGCCCCAGCCCCTCATCCTGAGATGGGAGCAGTCTCCCCAG CCCACCATCCCCATCGTGGGCATCGTTGCTGGCCTTGTTGTCCTTGGAGCTGTGGTCACTGGAGCTGTGGTCGCT GCTGTGATGTGGAGGAAGAAGAGCTCAGATAGAAACAGAGGGAGCTACTCTCAGGCTGCAGTCACTGACAGTGCC CAGGGCTCTGGGGTGTCTCTCACAGCTAATAAAGTG<u>TGA</u>GACAGCTTCCTTGTGTGGGGACTGAGAAGCAAGATAT

PCT/US2003/028547

FIGURE 2018

MAPRSLLLLLSGALALTDTWAGSHSLRYFSTAVSRPGRGEPRYIAVEYVDDTQFLRFDSDAAIPRMEPREPWVEQ EGPQYWEWTTGYAKANAQTDRVALRNLLRRYNQSEAGSHTLQGMNGCDMGPDGRLLRGYHQHAYDGKDYISLNED LRSWTAADTVAQITQRFYEAEEYAEEFRTYLEGECLELLRRYLENGKETLQRADPPKAHVAHHPISDHEATLRCW ALGFYPAEITLTWQRDGEEQTQDTELVETRPAGDGTFQKWAAVVVPSGEEQRYTCHVQHEGLPQPLILRWEQSPQ PTIPIVGIVAGLVVLGAVVTGAVVAAVMWRKKSSDRNRGSYSQAAVTDSAQGSGVSLTANKV

PCT/US2003/028547

2197/6881 FIGURE 2019

PCT/US2003/028547

2198/6881 FIGURE 2020

 ${\tt MAEEKPKEGVKTENNDHINLKVAGQDGSVVQFKIKRHTPLSKLMKAYCERQGLSMRQIRFRFDGQPMKQTHLHSWKWRMKIQLMCSNSRREVSTEKGTCFFTPELCSLKTKITFSIRKLQFASTTS}$

PCT/US2003/028547

FIGURE 2021

PCT/US2003/028547

2200/6881 FIGURE 2022

 ${\tt MAEEKPKEGVKTENNDHINLKVAGQDGSVVQFKIKRHTPLSKLMKAYCERQGLSMRQIRFRFDGQPMKQTHLHSWKWRMKIQLMCSNSRREVSTEKGTCFFTPELCSLKTKITFSISLSFPPSPFLYCT}$

PCT/US2003/028547

FIGURE 2023

PCT/US2003/028547

2202/6881 FIGURE 2024

MEGTQEYDSSMQTVRFQGERRKSPSNATFSPFFWMPHSAKSLVADAGIHSRNQHSYAIASFIKYSQLHFKSRESR AGARDQPIIWKLKANYSAEERFLLLGFSDWPSLQPVLFALVLLCYLLTLTGNSALVLLAVRDPRLHTPMYYFLCH LALVDAGFTTSVVPPLLANLRGPALWLPRSHCTAQLCASLALGSAECVLLAVMALDRAAAVCRPLRYAGLVSPRL CRTLASASWLSGLTNSVAQTALLAERPLCAPRLLDHFICELPALLKLACGGDGDTTENQMFAARVVILLLPFAVI LASYGAVARAVCCMRFSGGRRRAVGTCGSHLTAVCLFYGSAIYTYLQPAQRYNQARGKFVSLFYTVVTPALNPLI YTLRNKKVKGAARRLLRSLGRGQAGQ

PCT/US2003/028547

FIGURE 2025

ATGGGGAGAAGGTATGTGAGGAAGGAAAGAAAAAGGCCAGCAGGTGAAGAAAAAGAAGAAGGTCTGGTGAGGACA ${\tt ATGGAGACGGCCAATCGTTCCTTAAAACGGTCTCCTCCTCGTTCCTCTCCAAGATGGCAAGGGAGCCTGC}$ AAATTCGGTCTCCAAGGATCCCTCTGCCCAGAGCAACGAACTCCCTTTGGCAATATAGGAATAATCTTCATTCTC CCTGCAATTGTGCACATTAATAGGCTGTTTAATGAAAGTACAGTGTGGAGCTCATTATTGCGAACAGCAGCCCTT AGAGATCGTAGCTGGCTGGTAAAGGCGGCTTTAGAGCGGACGCCCAGGCTTCTTCATCAGCTTACCAGAAGGTTG GAGGCAGAAGACCTCCCATTTGCAGATTCACTCATTTCTCCGCTTATGCTTCCGTTCTTTGAAAGTGAACCACTA GGTTTCAGAAAGCACCAGGCAGTTAAAACAGAGTTTACTCCCTCGGTCACTGCACTAGAAATCAGGAGGCGAACA CTGTACCTAAACATAAAACGACATTCTCAAAAACTGCCCTGCACAGGCTTGTTGGGACTTCACGATCCTTCTTGG ACCTGCATCCCCCTCTTCTCTGGTACTCGGACCAAAATCGAACAATCAAGCAACAAAGTTGGCCTTAAAATTGAG GCCCCAGAGATGAGGTTACTGAGCGGGTATATGTCACAGAGCCAAACTTTCTGCAATGAATTGGAAAAGAACATC AAGACAGAGGGAGGAGCGCTGGGGGTGAACACCGCCTTGACCTTTGTAACCTGCTGCACAAATAAGGAGTGGTTG GGGAGAGTTTTGGGGAATCCCGAAAGACAGCCCAGAGATGCTGGACTGCGAATGCAGGCGCGCTGCAGGCGAGGC GCTGGCCGCAAAGTGGGTCTCATTGCTCCCCGCCGGACTGGACGTCTCCGGGGGAACGAAGACTGTGCAGGAGAAA GAGAGCTAG

PCT/US2003/028547

FIGURE 2026

MGRRYVRKERKRPAGEEKEEGLVRTMETANRSLKRSPPPGSSLQDGKGACKFGLQGSLCPEQRTPFGNIGIIFIL PAIVHINRLFNESTVWSSLLRTAALRDRSWLVKAALERTPRLHQLTRRLEAEDLPFADSLISPLMLPFFESEPL GFRKHQAVKTEFTPSVTALEIRRRTLYLNIKRHSQKLPCTGLLGLHDPSWTCIPLFSGTRTKIEQSSNKVGLKIE APEMRLLSGYMSQSQTFCNELEKNIKTEGGALGVNTALTFVTCCTNKEWLLCQFSLKRCLTSWLCEFEYSFQAGS GRVLGNPERQPRDAGLRMQARCRRGWEGRQERCGYRETRRGRGRRRAPLLRVLALKATTGQRGGARKTQPSRKSF EKISGKKIMLPETVEARPAFKMDAPAGRKVGLIAPRRTGRLRGTKTVQEKES

PCT/US2003/028547

FIGURE 2027

 ${\tt TACGGCCGTCGTGTCAGTCAAC} \underline{{\tt ATC}} {\tt GAGGCAGAGGAATCGGAGAAGGCCGCAACGGAGCAAGAGCCC}$ GCTGGAAGGGACAGAACAGACACTAGATGCGGAGGAGGAGGAGGAGGAATCCGAAGAAGCGGCCTGTGGCAGCAA GAAGCGGGTAGTGCCAGGTATTGTGTACCTGGGCCATATCCCGCCGCGCTTCCGGCCCCTGCACGTCCGCAACCT TCTCAGCGCCTATGGCGAGGTCGGACGCGTCTTCTTCAGGCTGAGGACCGGTTCGTGAGACGCAAGAAGAAGGC AGCAGCAGCTGCCGGAGGAAAAAAGCGGTCCTACACCAAGGACTACACCGAGGGATGGGTGGAGTTCCGTGACAA GCGCATAGCCAAGCGCGTGGCGGCCAGTCTACACAACACGCCTATGGGTGCCCGCAGGCGCAGCCCCTTCCGTTA TGATCTTTGGAACCTCAAGTACTTGCACCGTTTCACCTGGTCCCACCTCAGCGAGCACCTCGCCTTTGAGCGCCA GGTGCGCAGGCAGCGCTTGAGAGCGAGGTTGCTCAAGCCAAGCGTGAGACCGACTTCTATCTTCAAAGTGTGGA ACGGGGACAACGCTTTCTTGCGGCCGATGGGGACCCTGCTCGCCCAGATGGCTCCTGGACATTTGCCCAGCGTCC TACTGAGCAGGAACTGAGGGCCCGTAAAGCAGCACGGCCAGGGGGACGTGAACGGGCTCGCCTGGCAACTGCCCA GGACAAGGCCCGCTCCAACAAAGGGCTCCTGGCCAGGATCTTTGGAGCCCCGCCACCCTCAGAGAGCATGGAGGG ${ t A}{ t C}{ t$ CCTCATACTAGAATGATCGTGACTACCCGGGCAGACATTTTACTGTGTTTCTCAGACCAAGTGTCTACTGATGGC CCAAACATGGAGTTTTGTGGGCTTCCACTGTCCCCACTCCGAACTCCTGTATGTGCCTGGCTGAGTCACCTAATT GGGTCCCCTGAAAATCCCACTTCCTGCCCCCAGAAAGGGCCTTTATTTCCAACTAGGAGGATAATGCCTAGTCCA GGCAATCTTTCTCTGTTTAGCAGTCACAGGTGAGGGTGGTATTAGCATCTTTTTTATGTAGAAAAAATTGAGTTA ATGGGGTGGACTGGGTTGGGAAGAATACATTTCCTAATGTATTTATAGAAAATAAAAATATTTTTATGTGCCTT TTTATTTTTGTTGGTGGGGAGGTCATTGGACAAGTTCCAACTTTCATCTTGTGTTCCCTTCACCTTCATATCCTG AATATCTTAGCCCAGTTTATCAATCAGTTATCTTAAGTCAGCATTTTCTAAGCCATTGTTTGAGGAAACAGTGAC AATAGGTAATAACACATCTTAGTATTAAGAGTTTTACAGGCCACTAGTATAAGATAGGCATCGTGGTAGATGCAT AGTGGTGAGTCACCCACCCAAGTTTTCCAGATCATTCCTACAAAGTAAACTGGGAGAATAATAAGTCTGAAAG AGTGTGGAGTGCTCCCACAATTACAAAGAATGCTTCCTGGGTGGAGTGTTGAGTTGGAACCATTGTAAAGGTGGG CAAAGCCTAGTAGAGAACCAGTGCACCTCAGGTGCACTTACATATGGTGGGGCTGAGGCAAAGCAGCCCTGTAGG CTTCAAAGAATCAGTGTAAGCCACTAAAAGGAACTGAAAACCTAGGTGTCACAATAAACAGTCTACACAGTCTCA CGTAGACCAAAATTCTGATCATTTTCCAGGCTGTTGCATGAAGTGATAGAGTATGATTATAATTTCTGTTTGCTT GTGCTGTTTGTTTTTCTCTCTCTCATGTGATGATCTGTGTTTTATAGGGTAGAGTGGATTTGTCTACTT TGGCTGTAAAATACCCTAATCACATTATGATCTTGACAGGTGCACTTTACTGGGGAGAATAAAAAGGACCATACG GTAAA

PCT/US2003/028547

2206/6881 FIGURE 2028

 $\label{thm:constraint} $$ $$ MEAEESEKAATEQEPLEGTEQTLDAEEEQEESEEAACGSKKRVVPGIVYLGHIPPRFRPLHVRNLLSAYGEVGRV $$ $$ FQAEDRFVRKKKAAAAAGGKKRSYTKDYTEGWVEFRDKRIAKRVAASLHNTPMGARRRSPFRYDLWNLKYLHR $$ $$ FTWSHLSEHLAFERQVRRQRLRAEVAQAKRETDFYLQSVERGQRFLAADGDPARPDGSWTFAQRPTEQELRARKA ARPGGRERARLATAQDKARSNKGLLARIFGAPPPSESMEGPSLVRDS$

PCT/US2003/028547

2207/6881 FIGURE 2029

CCGTCTTTATTCTGTGGGCTCTGATTCTCCAATGGGAATACCAAGGGATGGTTTTCCATACTGGAACCCAAAGGT AAAGACACTCAAGGACAGACATTTTTGGCAGAGCATAGATGAAAATGGCAAGTTCCCTGGCTTTCCTTCTGCTCA ACTTTCATGTCTCCCTCCTCTTGGTCCAGCTGCTCACTCCTTGCTCAGCTCAGTTTTCTGTGCTTGGACCCTCTG GGCCCATCCTGGCCATGGTGGGTGAAGACGCTGATCTGCCCTGTCACCTGTTCCCGACCATGAGTGCAGAGACCA TGGAGCTGAAGTGGGTAAGTTCCAGCCTAAGGCAGGTGGTGAACGTGTATGCAGATGGAAAGGAAGTGGAAGACA GGCAGAGTGCACCGTATCGAGGGAGAACTTCGATTCTGCGGGATGGCATCACTGCAGGGAAGGCTGCTCTCCGAA TACACAACGTCACAGCCTCTGACAGTGGAAAGTACTTGTGTTATTTCCAAGATGGTGACTTCTATGAAAAAGCCC TGGTGGAGCTGAAGGTTGCAGCACTGGGTTCTAATCTTCACGTCGAAGTGAAGGGTTATGAGGATGGAGGGATCC ATCTGGAGTGCAGGTCCACCGGCTGGTACCCCCAACCCCAAATACAGTGGAGCAACGCCAAGGGAGAGAACATCC CAGCTGTGGAAGCACCTGTGGTTGCAGATGGAGTGGGCCTATATGAAGTAGCAGCATCTGTGATCATGAGAGGCG CAGACCCCTTCTTCAGGAGCGCCCAGCCCTGGATCGCAGCCCTGGCAGGGACCCTGCCTATCTTGCTGCTGCTTC TCGCCGGAGCCAGTTACTTCTTGTGGAGACAACAGAAGGAAATAACTGCTCTGTCCAGTGAGATAGAAAGTGAGC AGAGGAAAAAATCCAGTACT<u>TGA</u>CTCGTGGAGAGGAGTCTTCGTCCGATACCAATAAGTCAGCCTGATGCTCTAA TATGGAAAAATAGACTGCAGAAAAGGGGAACTCATTTAGCTCACGAGTGGTCGAGTGAAGATTGAAAATTAACCT CTGAGGGCCAGCACAGCAGCTCATGCCTGTAATCCTAGCACTTTGGAAGGCTGAGGAGGGCGGATCACAAGGTCA GGAGATCAAGACCATCCTGGCTAACACGGTGAAACCCCGTCTCTACTAAAAATACAAAAAATAAAAAATTAGCCG GGCATGGTGACGGGCACCTGTAGTCCCAGCTACTCGGGAGGCTGAGGCAGGAGAATGGCATGAACCCGGAAGGCA GAGCTTGCAGTGAGCCGAGATCACGCCACTGCACTCCAGCCTGGGAGACAGAGCGAGACTCTGTCTCAAGAAAAA ΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑ

WO 2004/030615 PCT/US2003/028547

2208/6881 FIGURE 2030

MKMASSLAFLLLNFHVSLLLVQLLTPCSAQFSVLGPSGPILAMVGEDADLPCHLFPTMSAETMELKWVSSSLRQV VNVYADGKEVEDRQSAPYRGRTSILRDGITAGKAALRIHNVTASDSGKYLCYFQDGDFYEKALVELKVAALGSNL HVEVKGYEDGGIHLECRSTGWYPQPQIQWSNAKGENIPAVEAPVVADGVGLYEVAASVIMRGGSGEGVSCIIRNS LLGLEKTASISIADPFFRSAQPWIAALAGTLPILLLLLAGASYFLWRQQKEITALSSEIESEQEMKEMGYAATER EISLRESLQEELKRKKSST

PCT/US2003/028547

2209/6881 FIGURE 2031

ATGGACAGGACTGTCATTCAGAAATACCACACTGTGAATGGCCACAGCTGTGAAGTTAGGAAAGCCCTGTCAAAG
CAAGAGATGGTTAGTGCTTCATCCAGCCAAAGAGGTCGAAGTGGTTCTGGAAACTTTGCTGGTGGTCTTAGAAGT
GGTTTCAGTGGGAATAACAACTTTGGTCGTGGAGGAAACTTCCGTGGTCGTGGGGCCTTTGGTGGCAGCCGTGGT
GGTGGTGGATATGATGGCAGTGGGGATGGCTATAATGGATATGGCCCAGATAAACAGTCTCCACTTGTTCAGGAC
TTCAACGGAGATATTCCACTCAGTCCTGCTTATGCCAGACACCTTGCACGAGCCTCTCCCAAGATAGCTAGGACT
CAGGGAACATGCAGGCTGACACAAGCATTGATGATCTATATTAATGCAAGTGTAATATTGGAATGGAATTTTTA
CAAATGGTGTCATTACCAGCCATTAATGCCATAGCTTTAATTTGTTCATTAAGTTTAGCAGCCAGTTACCTAACA
GGTCATCAAAGGAGGGACACAGAAGAGGGCAAGCACTGATAATGAAAGGTCTATATCACAGGTGTGCTCAGAAAAG
GCAAGCACAGATCACAGTTTCCAGGGCTGCCAGCAGAATGGATTTAATATTTGCCACGTGGGAAGAAGAAAAAAGCC
ACAGGGTGCAGATATCAGGAATCTGAATTTCCGGGGCATAACGTGTGCACAGATGCAGCTTCAACAGATTCATCA
TATCATCCCCTTCAGAGCTGCTGTGACAGTTTACACCAGATTAACTCTCAGTTTCCAGAAAAAAGAGGAAACTCTG
GCCTAG

PCT/US2003/028547

2210/6881 FIGURE 2032

TTCCCCAGCATTCGAGAAACTCCTCTCTACTTTAGCACGGTCTCCAGACTCAGCCGAGAGACAGCAAACTGCAGC GCGGTGAGAGAGGGAGAGAGAGAGAGAGAGACTCTCCAGCCTGGGAACTATAACTCCTCTGCGAGAGGCGGAG AACTCCTTCCCCAAATCTTTTGGGGACTTTTCTCTCTTTACCCACCTCCGCCCCTGCGAGGAGTTGAGGGGCCAG TTCGGCCGCGCGCGCGTCTTCCCGTTCGGCGTGTGCTTGGCCCGGGGAACCGGGAGGGCCCGGCGATCGCGCGG CGGCCGCGGGGGTGTGAGCGCGCGTGGGCCCCGCCGAGCCAAGCCA<u>ATG</u>CTGCAGCAAACCAACAATGCCG AGAACACGGAAGCGCTGCTGGCCGGCGAGAGCTCGGACTCGGGCCCGGCCTCGAGCTGGGAATCGCCTCCTCCC CCACGCCCGGCTCCACCGCCTCCACGGGCGGCAAGGCCGACGACCCGAGCTGGTGCAAGACCCCGAGTGGGCACA TCAAGCGACCCATGAACGCCTTCATGGTGTGGTCGCAGATCGAGCGGCGCAAGATCATGGAGCAGTCGCCCGACA TGCACAACGCCGAGATCTCCAAGCGGCTGGGCAAACGCTGGAAGCTGCTCAAAGACAGCGACAAGATCCCTTTCA TTCGAGAGGCGGACCGCCTCAAGCACATGCCTGACTACCCCGACTACAAGTACCGGCCCAGGAAGAAGG TGAAGTCCGGCAACGCCAACTCCAGCTCCTCGGCCGCCGCCTCCTCCAAGCCGGGGGAGAAGGGAGACAAGGTCG GTGGGGTTAGCAAACCGCACGCCAAGCTCATCCTGGCAGGCGGCGGCGGCGGCGGGAAAGCAGCGGCTGCCGCCG CCGCCTCCTTCGCCGCCGAACAGGCGGGGCCGCCCTGCTGCCCCTGGGCGCCGCCGCCGACCACCACTCGC TGTACAAGGCGCGGACTCCCAGCGCCTCCGGCCTCCTCGGCAGCCTCCGCAGCGCTCGCGGCCC CGGGCAAGCACCTGGCGGAGAAGAAGGTGAAGCGCGTCTTACCTGTTCGGCGGCCTGGGCACGTCGTCGTCGCCCG TGGGCGGCGTGGGCGCGGACCCCAGCGACCCCTGGGCCTGTACGAGGAGGAGGGCGCGGGCTGCTCGC GCGGCTACGCCAGCCTGCGCCGCCCCGCCCCGTCCAGCGCGCCCTCGCACGCGTCCTCCTCGGCCTCGT CCCACTCCTCCTCCTCCTCGGGCTCCTCGTCCTCCGACGACGAGTTCGAAGACGACCTGCTCGACCTGA ACCCCAGCTCAAACTTTGAGAGCATGTCCCTGGGCAGCTTCAGTTCGTCGTCGGCGCTCGACCGGGACCTGGATT TTAACTTCGAGCCCGGCTCCGCACTTCGAGTTCCCGGACTACTGCACGCCCGAGGTGAGCGAGATGATCT CGGGGGGGTAGGAGAGAAAAAAAAAAGTGAAAAAAAAGAAACGAAAAGGACAGACGAAGAGTTTAAAGAGAAA AGGGAAAAAAGAAAAAGTAAGCAGGGCTCGTTCGCCCGCGTTCTCGTCGTCGATCAAGGAGCGCGGCGC GTTTTGGACCCGCGCTCCCATCCCCACCTTCCCGGGCCGGGGACCCACTCTGCCCAGCCGGAGGGACGCGGAGG TTCGAGTTTGCTCCCCTTTGAAGAGACCCCCTCCCCCTTCCAACGAGCTTCCGGACTTGTCTGCACCCCA GCAAGAAGGCGAGTTAGTTTTCTAGAGGACTTGAAGGAGTCTCCCCCTTCCTGCATCACCACCTTGGTTTTGTTTT ATTTTGCTTCTTGGTCAAGAAAGGAGGGGAGAACCCAGCGCACCCCTCCCCCCTTTTTTTAAACGCGTGATGAA GACAGAAGGCTCCGGGGTGACGAATTTGGCCGATGGCAGATGTTTTGGGGGGAACGCCGGGACTGAGAGACTCCAC GCAGGCGAATTCCCGTTTGGGGCCTTTTTTTCCTCCTCTTTTTCCCCCTTGCCCCCTCTGCAGCCGGAGGAGGAGA TGTTGAGGGGAGGAGGCCAGTGTGACCGGCGCTAGGAAATGACCCCGAGAACCCCGTTGGAAGCGCAGCAGC GGGAGCTAGGGGCGGGGGGGGGGGGACACGAACTGGAAGGGGGTTCACGGTCAAACTGAAATGGATTTGCACG TTGGGGAGCTGGCGGCGGCTGCTGGGCCTCCGCCTTCTTTTCTACGTGAAATCAGTGAGGTGAGACTTCCCA AAAAAAAAAAAGAAAAAAGGG

PCT/US2003/028547

2211/6881 FIGURE 2033

MVQQTNNAENTEALLAGESSDSGAGLELGIASSPTPGSTASTGGKADDPSWCKTPSGHIKRPMNAFMVWSQIERR KIMEQSPDMHNAEISKRLGKRWKLLKDSDKIPFIREAERLRLKHMADYPDYKYRPRKKVKSGNANSSSSAAASSK PGEKGDKVGGSGGGGGGGGGGGGSSNAGGGGGGGASGGGANSKPAQKKSCGSKVAGGAGGGVSKPHAKLILAGGGG GGKAAAAAAASFAAEQAGAAALLPLGAAADHHSLYKARTPSASASASAASAALAAPGKHLAEKKVKRVYLFG GLGTSSSPVGGVGAGADPSDPLGLYEEEGAGCSPDAPSLSGRSSAASSPAAGRSPADHRGYASLRAASPAPSSAP SHASSSASSHSSSSSSSSSSDDEFEDDLLDLNPSSNFESMSLGSFSSSSALDRDLDFNFEPGSGSHFEFPDYC TPEVSEMISGDWLESSISNLVFTY

PCT/US2003/028547

FIGURE 2034

GACGAGGAGGAGGAGGAGGAAAAAGAAAAGGTCTCATCGTGGAAGGCAAGAGGGAAAAGAAAAAAGTAGAG AGGTTGACAATGCAAGTCTCTTCCTTACAGAGAGAGCCATTTACAATTGCACAAGGAAAGGGGCAGAAACTTTGT GAAATTGAGAGGATACATTTTTTCTAAGTAAGAAGAAAACCGATGAACTTAGAAATCTACACAAACTGCTTTAC AACAGGCCAGGCACTGTGTCCTCATTAAAGAAGAATGTGGGTCAGTTCAGTGGCTTTCCATTTGAAAAAGGAAGT GTCCAATATAAAAAGAAGGAAGAAATGTTGAAAAAATTTAGAAATGCCATGTTAAAGAGCCATCTGTGAGGTTCTT GATTTGGAGAGATCAGGTGTAAATAGTGAACTAGTGAAGAGGATCTTGAATTTCTTAATGCATCCAAAGCCTTCT GGCAAACCATTGCCGAAATCTAAAAAAACTTGTAGCAAAGGCAGTAAAAAGGAACGGAACAGTTCTGGAATGGCA AGGAAGGCTAAGCGAACCAAATGTCCTGAAATTCTGTCAGATGAATCTAGTAGTGATGAAGATGAAAAGAAAAAC AAGGAAGATCTTCAGATGATGAAGATAAAGAAAGTGAAGAGAGCCACCAAAAAAGACAGCCAAAAGAGAAAAAA CCTAAACAGAAAGCTACTTCTAAAAGTAAAAAATCTGTGAAAAGTGCCAATGTTAAGAAAGCAGATAGCAGCACC AAGTTGAAGAAACCCCCTACAGATGAAGAGTTAAAGGAAACAATAAAGAAATTACTGGCCAGTGCTAACTTGGAA TTCATAAAAACAACTGTAAAAGAGCTAATTTCTTGAGATAGAGGACAGAGAAGATGACTCGTTCCCATAGATTTG AAGATCTGATTTATACCATTATACCAGCAAAGAGAATGTATTTCCTTTTCTAAATCCTTGTTAAGCAACGTTAGT ${\tt AGAACTTACTGCTGACCTTTTTATCTTGAGTGTTATGTGAATTTGAGTTTGCTGTTTTAAATTGCATTTCTATGC}$ CATTTTTAGTTTAAAATCTTGCATGGCATTAATTGTTCCTTGCTTTTATAGTTGTATTTTTGTACATTTTTGGATTT ATTTTGAATACACATCTCTGTCAGTGTGAAAATTCAGCGGCAGTGTGTCCATCATATTAAAAATATACAAGCTAC AGTTGTCCAGATCACTGAATTGGAACTTTTCTCCTGCATGTGTATATATGTCAAATTGTCAGCATGACAAAAGTG TTTTTAAACTCACATAGGTAGGTATCTTTATAGTTGTAGACTATGGAATGTCAGTGTTCAGCCAAACAGTATGAT GGAACAGTGAAAGTCAATTCAGTGATGGCAACACTGAAGGAACAGTTACCCTGCTTTGCCTCGAAAGTGTCATCA ATTTGTAATTTTAGTATTAACTCTGTAAAAGTGTCTGTAGGTACGTTTTATATTATATAAGGACAGACCAAAAAT CAACCTATCAAAGCTTCAAAAACTTTGGGAAAGGGTGGGATTAAGTACAAGCACATTTGGCTTACAGTAAATGAA CTGATTTTATTAACTGCTTTTGCCCATATAAAATGCTGATATTTACTGGAAACCTAGCCAGCTTCACGATTATG ACTAAAGTACCAGATTATAATGCCAGAATATAATGTGCAGGCAATCGTGGATGTCTCTGACAAAGTGTGTCTCAA **AAATAATATACTTTTACATTAAAGAAATTTAATGTTTCTCTGGAGTTGGGGCTCTTGGCTTTCAGAGTTTGGTTA** ATCAGTGTTGATTCTAGATGATCAACATAATGGACCACTCCTGAATGAGACTTAATTTTGTCTTTCAAATTTACT GTCTTAAATCAGTTTATTAAATCTGAATTTTAAAACATGCTGTTTATGACACAATGACACATTTGTTGCACCAAT TAAGTGTTGAAAAATATCTTTGCATCATAGAACAGAAATATATAAAAATATATGTTGAATGTTAACAGGTATTTT CACAGGTTTGTTTCTTGATAGTTACTCAGACACTAGGGAAAGGTAAATACAAGTGAACAAAATAAGCAACTAAAT

PCT/US2003/028547

FIGURE 2035

MSASAPAAEGEGTPTQPASEKEPEMPGPREESEEEEDEDDEEEEEEEKEKSLIVEGKREKKKVERLTMQVSSLQR EPFTIAQGKGQKLCEIERIHFFLSKKKTDELRNLHKLLYNRPGTVSSLKKNVGQFSGFPFEKGSVQYKKKEEMLK KFRNAMLKSICEVLDLERSGVNSELVKRILNFLMHPKPSGKPLPKSKKTCSKGSKKERNSSGMARKAKRTKCPEI LSDESSSDEDEKKNKEESSDDEDKESEEEPPKKTAKREKPKQKATSKSKKSVKSANVKKADSSTTKKNQNSSKKE SESEDSSDDEPLIKKLKKPPTDEELKETIKKLLASANLEEVTMKQICKKVYENYPTYDLTERKDFIKTTVKELIS

PCT/US2003/028547

FIGURE 2036A

GGGGGAGGGAAACGGAGCAGTGACAGGTATCCCAGAGGGTGCTGCTGAGGCGACGATGGCCGAGGGGCCCGAGGA AGCCCGAGGCCACCCTCCCGGGCAGGACGATGGCGGAGGGGACCACGAGCCCGTCCCTTCCCTGAGAGGCCCTCC TACCACCGCCGTCCCATGCCCCCGCGACGACCCCCAGGCCGAACCCCAGGCCCCGGGCCCGACAGCCCCGGG CTCCGGTGCAGAGCTGCAGGAGCAGGCGGCTGCGAGGCGCCCGAAGCCGCGGCGCCACGAGAGACCAGCTCG GCTGAGCGCCCGCGAGTACTCCCGGCAAGTGCACGAGTGGCTGTGGCAGTCCTACTGCGGCTACCTCACCTGGCA CAGCGGCCTGGCCGCCTTCCCAGCCTACTGCAGCCCCCAGCCCTCCCGCAGAGCTTCCCTTCGGGCGGCGCTGC AGTCCCCAGGCCGCGCGCCGCCCCCCGCAGCTGGGCTATTACAACCCCTTCTACTTCCTGAGCCCCGGGGC CGCGGGGCCTGACCCGCGGACAGCTGCCGGCATCAGCACCCCTGCTCCAGTCGCGGGCCTGGGACCCCGGGCTCC TCACGTGCAGGCGTCGGGCCACTCCAGTGACGAGGGTAGGATCCGCAGCCCCTTCGCGAAGCCCGAGCGA GACCGGGCGACAGGCAGGCAGAGATATGTTATTCCATCCTTGGCCCACAGATTTATGGCAGAGATGGTGGATTT CTTTATTCTCTTTTATAAAAGCAACCATTGTCTTAAGCATTATGCACCTCAGTGGGATAAAGGATATCTCTAA GTTTGCTATGCATTATATAATAGAAGAAATAGATGAAGACACATCAATGGAAGACTTGCAGAAAATGATGGTTGT GGCACTTATATACAGATTATTAGTTTGTTTCTATGAGATAATTTGCATTTTGGGGAGCAGGTGGAGCTACCCCAGG GAAGTTCCTGCTGGGGCTTCGAGTTGTGACATGTGATACATCAGTGCTTATTGCACCAAGTCGGGTTTTAGTGAT TCCTTCCTCAAATGTTAGCATTACAACGTCCACTATCCGAGCTTTGATCAAGAATTTTTCAATTGCTTCTTTTTT CCCTGCTTTCATCACACTGCTGTTTTTTCAGCATAATCGAACAGCTTATGACATTGTAGCAGGAACCATTGTGGT AAAAAGAATGGGGTCAGATGATGCCCCCCAAAACCCTGATTTCCACACACTAAGACTAAATTATGTATCAAGGC CATCAGTATCCCTGGGTTACACTAATTGATGATTTAGAAATTAAAGCAGTCACTCCAGTGTGATGCAGGTGACTA CTCTGAAAGTATTGATTATACTTGAATGCCAAAGAACTTGTCCAGAAGAAAAACCTGTTAAATTCAAGTATTAAA ATTTTTAGATCAAAAAGGCAAATGATTTTATAAACAATGGACAATATATACTTTCTTAAGATCTAAGGTACTTTC TATCCCAAAATAATGGAAAATGTCCAGTTGTGTTTTGTAAACACCTATGTAACTCATCTTTTAGTTTACACTTCC TGGGGAAATTGTCTTTGGTGTTTAGAGGAGGGAATGAGAACACAAATTGGATAATCCACTGTCTCCCATCCCAGG CCATACTGCAGTTCCCTCTCGTAATGATGTAACTTTACAACTATTCTTAATGCTTGAACATGTATTTAGGGGCAA TGATTACTGTTAATGGTGGGGGAGTAAGTTTTCACTGTAAATTGAACTTATAATTTATGTGCAAGTGTTTTCAGT GCCCTGAATCAAACTATAAATGTGGGGAGAAATCACCTCCATCAAACAGTTGCATATTTACTGTAAAAGTATTCC CAGTATGTGTGCAGCATGAAGAAAGTATTAGTGCTTCTCAGTGTTCTCAGTGTAAATTCTATTTATATACAGCAT TATTTCATGATTAACTCTAAGTACTATTAATTAATAGCTTGCGAAATATTAGCAATTTTCCCATTATGGACTATT CTCTCTAAAGCAAGAGAGACTAGCATTCCCAGACATCATTCTAGGGTCTTTAAGCTCATTTTGGGTCTGCTAAAG TTTGGGGGGAAATGTTACGCAAAGTGATACTGTGTATGTTGCCATTTTGCTTTATTCTTCTGTTGAAGCAAAATT GTGGGGTTTTATTATGTGTGTGTGTTTTCCTAGATGTCCCAGTTAGCTGTGCTGAGATATACCTGTACTATTTA TGGTTTAAGTTTTGATTCTTAGGTATTTTCTCCAGCTCTGACATTGTTTTCCAAAGACACACTAAACTGCATTGC ACAGTTCAAAATTTGATTACTTAAGGGATCAATCTAGGTGGTGTTCTTGGTCTTAAATTTAACAGCAAACACAGC ACATATCTATTATCACTATATTAATTTTCAAAGGTTTTTCTTTGACGTTTAAAACTGTGACAACAGATATTCACA TTTGATTATAGAAACTTAATGTCTATTAATAATTTTAGTACAAAATTTCATAAACCGTGTTTTTCAAAATAAGTT CATGGGGAAGATTGTGTTACTGCCCTTCACAGTGAAAAAAAGAAAAATCTTTCATTTTTAAAATTAGGAGATGTT ACGTAACTTGGCACTTTAGTAGTGTATACACTAGCATTAGTTTATACACCACTTTTGCCGCTGGGGAATTCAAGT GCCATCGAGATTATTTCATTTATACTATAAAACAAAAGCAAACTAGTCCAGTTTAATTTTTTGTACTTAGAATA GTATTATACTGTATAACCCTACAAAATACATAGAAGTATTATTTGCCTTCATAATAGAACCCAAGAGTCTGTTTC AATTTATGAATTCAGTATTTGCACCGAGATTTTGATTCCCAAAGTTTTGGAAAAAAATGACAAAACAACGAGGGAA GAAGGAACCAGACCTTAGTGCCACATATTTTTCTCTTGGGGTTGTAAGGTAGTCTCCTGCTTTCCAGAACACTTT

PCT/US2003/028547

2215/6881 FIGURE 2036B

WO 2004/030615 PCT/US2003/028547

FIGURE 2037

CCCGCATAGATGCGGACCTCAAGCTCGACTTCAAGGATGTCCTGCTCCGACCTAAGCGGAGCAGCCTCAAGAGCC GAGCCGAGGTGGATCTTGAACGCACCTTCACGTTTCGAAATTCAAAGCAGACCTACTCAGGGATTCCCATCATCG TGGCCAACATGGACACTGTGGGCACGTTTGAGATGGCAGCCGTGATGTCACAGCACTCCATGTTTACAGCAATTC ATAAGCATTACTCCCTGGATGACTGGAAGCTCTTTGCCACAAATCACCCAGAATGCCTGCAGAATGTAGCCGTGA GTTCAGGCAGTGGGCAGAATGATCTGGAAAAGATGACCAGCATCCTGGAAGCTGTGCCACAGGTTAAGTTTATTT GCCTGGATGTGGCCAATGGGTATTCAGAACATTTTGTGGAATTCGTGAAACTTGTCCGTGCCAAATTTCCTGAAC ACACCATTATGGCAGGGAACGTGGTGACAGGAGAAATGGTAGAAGAGCTTATTCTTTCCGGAGCAGATATCATCA AAGTGGGAGTTGGACCAGGTTCTGTGTGCACCACCGCACCAAGACGGGAGTGGGGTACCCCCAGCTGAGTGCCG TCATTGAGTGTGCCGACTCTGCCCATGGCCTGAAGGGCCACATCATCTCTGATGGAGGCTGTACGTGTCCAGGGG ATGTCGCCAAAGCCTTTGGAGCTGGAGCAGATTTTGTCATGCTGGGAGGAATGTTTTCGGGTCATACGGAGTGTG CTGGAGAAGTGTTTGAGAGGAACGGACGGAAGCTCAAGCTCTTCTACGGGATGAGCTCTGACACCGCCATGAACA AGCACGCAGGAGGAGTTGCTGAGTACAGAGCCTCTGAGGGTAAGACTGTGGAAGTTCCTTACAAAGGAGATGTGG ${\tt AAAACACTATCCTGGATATTCTCGGGGGACTGAGGTCCACGTGCACCTACGTGGGGGCCGCCAAACTCAAGGAGC}$ TCAGCAGGAGGGCAACATTCATCCGGGTGACCCAGCAGCACACACCGTGTTCAGC<u>TAA</u>CCCTGGGGACAAAGCA GCGTCTGGCTCGAGTGGAAGCGTCCAAACCTGCTTTTCCCATCTCCCCCCAAGTCTGTTCCGTCAGAGCTTCTGG CTGCTCCTGAATGGTGGAATGCTGTGTCCTCTTCTGTCTCCTGCTGCCTGGAGGCTTCGGGGCTCTCCCGCCT GCCTTCTCGGGGCCCAGACGCAAGGCACCGATTGGGCCAACATCAGAGCCCTGCTGCCCAGAACTCATAACCTCA AAGAAGATGGTTTCACTTTAATATAATGCTATTATCTT

PCT/US2003/028547

FIGURE 2038

MPRIDADLKLDFKDVLLRPKRSSLKSRAEVDLERTFTFRNSKQTYSGIPIIVANMDTVGTFEMAAVMSQHSMFTA IHKHYSLDDWKLFATNHPECLQNVAVSSGSGQNDLEKMTSILEAVPQVKFICLDVANGYSEHFVEFVKLVRAKFP EHTIMAGNVVTGEMVEELILSGADIIKVGVGPGSVCTTRTKTGVGYPQLSAVIECADSAHGLKGHIISDGGCTCP GDVAKAFGAGADFVMLGGMFSGHTECAGEVFERNGRKLKLFYGMSSDTAMNKHAGGVAEYRASEGKTVEVPYKGD VENTILDILGGLRSTCTYVGAAKLKELSRRATFIRVTQQHNTVFS

PCT/US2003/028547

2218/6881 FIGURE 2039A

TTATTTCAAGGCGAATCTGGCTTTGGGGGAAGAGAGAAAAGTCGGATTACAAGATCAACCACCAACAACA ATAAAAACCACCAGGATATTTTTTTGCAAATTTCTGACGGCTTTAAATTCATGAAGCAATTGTCCCCTTTTGCAA TCAGCATTTGGATCTCAGA<u>ATG</u>AGCAAGGAAAGACCCAAGAGGAATATCATTCAGAAGAAATACGATGACAGTGA TGGGATTCCGTGGTCAGAAGAACGGGTGGTACGTAAAGTCCTTTATTTGTCTCTGAAGGAGTTCAAGAATTCCCA GAAGAGGCAGCATGCGGAAGGCATTGCTGGGAGCCTGAAAACTGTGAATGGGCTCCTTGGTAATGACCAGTCTAA GGGATTAGGACCAGCATCAGAACAGTCAGAGAATGAAAAGGACGATGCATCCCAAGTGTCCTCCACTAGCAACGA TGTTAGTTCTTCAGATTTTGAAGAAGGGCCGTCGAGGAAAAGGCCCCAGGCTGCAAGCACAAAGGAAGTTTGCTCA GTCTCAGCCGAATAGTCCCAGCACAACTCCAGTAAAGATAGTGGAGCCATTGCTACCCCCTCCAGCTACTCAGAT ATCAGACCTCTCTAAAAGGAAGCCTAAGACAGAAGATTTTCTTACCTTTCTCTGCCTTCGAGGTTCTCCTGCGCT GCCCAACAGCATGGTGTATTTTGGAAGCTCTCAGGATGAGGAGGAAGTCGAGGAGGAAGATGATGAGACAGAAGA CGTCAAAACAGCCACCAACAATGCTTCATCTTCATGCCAGTCGACCCCCAGGAAAGGAAAAACCCACAAACATGT TCACAACGGGCATGTTTTCAATGGTTCCAGCAGGTCAACACGGGAGAAGGAACCTGTTCAAAAAACACAAAAGCAA AGAGGCCACTCCCGCAAAGGAGAAGCACAGCGATCACCGGGCTGACAGCCGCCGGGAGCAGGCTTCAGCTAACCA CCCCGCAGCGCCCCTCCACGGTTCCTCGGCCAAGGGGCTTGCTGCCACCCATCACCACCCCCCTCTGCATCG GTCGGCTCAGGACTTACGGAAACAGGTTTCTAAGGTAAACGGAGTCACTCGAATGTCATCTCTGGGTGCAGGTGT AACCAGTGCCAAAAAGATGCGCGAGGTCAGACCTTCACCATCCAAAACTGTGAAGTACACTGCCACGGTGACGAA GGGGGCTGTCACATACACCAAAGCCAAGAGAAACTGGTCAAGGACACCAAACCCAATCACCACAAGCCCAGTTC CGCTGTCAACCACACTCTCAGGGAAAACTGAAAGTAGCAATGCAAAAACCCGCAAACAGGTGCTATCCCTCGG GGGGGCGTCCAAGTCCACTGGGCCCGCCGTCAATGGCCTCAAGGTCAGTGGCAGGTTGAACCCAAAGTCATGCAC TAAGGAGGTGGGGGGGCGCAGCTGCGGAGGGCCTGCAGCTGCGGAGGGGCTGCGGAACTCCAAGAGGAGACT GGAAGAGGCACACCAGGCGGAGAAGCCGCAGTCGCCCCCCAAGAAGATGAAAGGGGCGGCTGGCCCCGCCGAAGG GGAGAGGAATCGGCCGAAGCGGCCACGGCCGGGAAGAGCACGCCAGGCAGACAAGCACATGGCAAGGCGGACAG CGCCTCCTGTGAAAATCGTTCTACCTCGCAACCGGAGTCCGTGCACAAGCCGCAGGACTCGGGCAAGGCCGAGAA GGGCGGCGCAAGGCCGGGTGGGCGGCCATGGACGAGATCCCCGTCCTCAGGCCCTCCGCCAAGGAGTTCCACGA TCCGCTCATCTACATCGAGTCGGTCCGCGCTCAGGTGGAGAAGTTCGGGATGTGCAGGGTGATCCCCCCTCCGGA CTGGCGGCCCGAGTGCAAGCTCAACGATGAGATGCGGTTTGTCACGCAGATTCAGCACATCCACAAGCTGGGCCG GCGCTGGGGCCCCAACGTGCAGCGGCTGGCCTGCATCAAGAAGCACCTCAAATCTCAGGGCATCACCATGGACGA GCTCCCGCTCATAGGGGGCTGTGAGCTCGACCTGGCCTGCTTTTTCCGGCTGATTAATGAGATGGGCGGCATGCA GCAAGTGACTGACCTCAAAAAATGGAACAAACTAGCAGACATGCTGCGCATCCCCAGAACTGCCCAGGACCGGCT GGCCAAGCTGCAGGAGGCCTACTGCCAGTACCTACTCTCCTACGACTCCCTGTCCCCAGAGGAGCACCGGCGGCT GGAGAAGGAGGTGCTGATGGAGAAGGAGATCCTGGAGAAGCGCAAGGGGCCGCTGGAAGGCCACACAGAGAACGA CCACCACAAGTTCCACCCTCTGCCCCGCTTCGAGCCCAAGAATGGGCTCATCCACGGCGTGGCCCCCAGGAACGG CTTCCGCAGCAAGCTCAAGGAGGTGGGCCAGGCCCAGTTGAAGACTGGCCGGCGACTCTTCGCTCAGGAAAA AGAAGTGGTCAAGGAAGAGGAGGAGGACAAAGGCGTCCTCAATGACTTCCACAAGTGCATCTATAAGGGAAGGTC TGTTTCTCTAACAACTTTTTATCGAACAGCGAGGAATATCATGAGCATGTGTTTCAGCAAGGAGCCTGCCCCAGC CGAAATCGAGCAAGAGTACTGGAGGCTAGTGGAAGAAGAAGGACTGCCACGTGGCAGTGCACTGCGGCAAGGTGGA CCTCCCCAATAACACAGGGTCCATCCTGCGTCACCTCGGTGCTGTGCCTGGAGTGACTATTCCCTGGCTAAATAT TGCTGACTGCATTTGGTATTGCATTCCTGCTGAGGAGGAGAACAAGCTGGAAGATGTGGTCCACACCCTGCTGCA AGCCAATGGCACCCCAGGGCTGCAGATGCTGGAAAGCAACGTCATGATCTCCCCGGAGGTGCTGTGCAAAGAGGG GATCAAGGTGCACAGGACCGTGCAGCAGAGTGGCCAGTTTGTCGTCTGCTTCCCGGGATCCTTTGTGTCCAAAGT GTGCTGTGGGTACAGCGTGTCTGAAACCGTGCACTTTGCTACCACCCAGTGGACAAGTATGGGCTTTGAGACCGC CAAGGAAATGAAGCGTCGCCATATAGCTAAGCCATTCTCCATGGAGAAGTTACTCTACCAGATTGCACAAGCAGA AGCAAAAAAAGGAAACGGTCCCACTCTCAGTACCATCTCAGCCCTCCTGGATGAGCTCAGGGATACAGAGCTGCG

PCT/US2003/028547

FIGURE 2039B

GGCGGACGGGAAGAAAAGCCTCGAAAGTGGCTGCAGTTGGAGACGTCAGAGAGGAGGTGTCAGATCTGCCAGCA GGAGAAACAGAAGTCCTGCCGAGGGCTGAAGTTGATGTACCGCTACGATGAGGAACAGATTATCAGTCTGGTCAA TCAGATCTGCGGCAAAGTGTCTGGTAAAAACGGCAGCATTGAGAACTGTCTCAGTAAACCCACACCAAAAAGAGG TCCCCGCAAGAGAGCGACAGTGGACGTGCCCCCCTCCCGTCTGTCAGCCTCCAGTTCATCCAAAAGTGCTTCGAG ACTTGCTGTAGGATTCAAGCTGTCTTTGCACTAGCTCTAAAGAAGATTTTCTTCTGGTTTTAGAGAACTAATTTT GTTTTAGCATTAAACTGTTGAACTTTTTTTTGTACTTAGAAAACCTAGATACTGCAGTCAGATTTTGGAAACTGC CGTATAGTCACTGTTTTAAAAACCCCGGAGGGGCTGTATTAATTTGTATTGCCCCATGGCTGACAAAAGCCTTTT TTTTTGGTTTTGATTTTTTTTTTTTTTTGTAACTGTTGGGGGGAAAAAGGCTTTTTAACCCATTTTTGAAGAGGGTG AAGTTTGGAGAACAATTTAAAAACCATCAGTCATGTGAGCAGATTTTTTAGAAGGGATAGGAGACACACGCGCA CACACACACACACGAAACTTGAAATGGCTTTGCTTTGGCTGTCGTCTTCTGCCGTGTGCCAGATGAGCTTGTG ATCTGGGAAGCCGGGCACCCCGTTTTGTTTCTCTGGGCGGTTGTGGCAGCTGAAGGCGGACGTTGTTTCCTAA CCATAGGTGGAACGAGGAGCGAGCGAGTGGGCTCTCCACCAGCACATCACTATGCATCTGTTCCAGGAAAGA AGAAAAGCGAGCGAGGAGACGGAAAAGACTGCCTGCCTTGGAGGGGTCACATGAGGGAGACCTGTGCCTGATTT CATTAGGAAATCCATTCTGTTATTTTTTGGTGCTGTTGGCTACTTTATCAAAAAACCCTTCAATAGCATCCTTAA GATTTAAAAAAAAAAAAAAAAAAAGGAAAAAAAGTGATGGAAGCCGTAAGTGCTTCTTTGTCATCGACGTGCA AAAACTTGTTTCATTTATGATCATGTAGAGAGCCACTAGGAGGCCTGCAGTTATTTTTGAATGTGAAAATGCATT AAGATGAAGAAAAGCCTTACATTTCAGTTTCTTCATCGGTTGGATTGGATGCTTACAGGGTTTTTCTTGTAACAT TTATAAGTGCTGCTTACATCACTGAACAACAACAAAAAAATAATAATGGAGTAGCTGTTGCCCTTCTCCGGTTGT GTGTACAGTATGTGTGGAATAAAAAAGGGAAACTGTTTTCACAAGCTGTTCTTTGTTTCATAATTGGATTCATCA ATCCCGTAGCTACCCATATTGCACTGAGCTTGCCAGTGGTGACTGCCAGGAACGTCCTATGATCCACTTTGTTGG TTGTTGTTGCAGAAGACTGAACTGTTTTGGAATATTTAACAATTACAGAAACAGTCAAGTGTTTTCCAATGTGGT TGTCCGGTTTCTATGGCCTTGCTGTGTACTTTCCCTCTTTTTGACAGTAAACTTCTGCCTATGGCTTACAGTTTG GTTTACTTTTCAGGTTTGTACTACAAGGTTTAATAATAAAAACAAAGTTTTTTGGA

PCT/US2003/028547

FIGURE 2040

MSKERPKRNIIQKKYDDSDGIPWSEERVVRKVLYLSLKEFKNSQKRQHAEGIAGSLKTVNGLLGNDQSKGLGPAS EQSENEKDDASQVSSTSNDVSSSDFEEGPSRKRPRLQAQRKFAQSQPNSPSTTPVKIVEPLLPPPATQISDLSKR KPKTEDFLTFLCLRGSPALPNSMVYFGSSQDEEEVEEEDDETEDVKTATNNASSSCQSTPRKGKTHKHVHNGHVF NGSSRSTREKEPVQKHKSKEATPAKEKHSDHRADSRREQASANHPAAAPSTGSSAKGLAATHHHPPLHRSAQDLR KQVSKVNGVTRMSSLGAGVTSAKKMREVRPSPSKTVKYTATVTKGAVTYTKAKRELVKDTKPNHHKPSSAVNHTI SGKTESSNAKTRKQVLSLGGASKSTGPAVNGLKVSGRLNPKSCTKEVGGRQLREGLQLREGLRNSKRRLEEAHQA EKPQSPPKKMKGAAGPAEGPGKKAPAERGLLNGHVKKEVPERSLERNRPKRATAGKSTPGRQAHGKADSASCENR STSQPESVHKPQDSGKAEKGGGKAGWAAMDEIPVLRPSAKEFHDPLIYIESVRAQVEKFGMCRVIPPPDWRPECK LNDEMRFVTQIQHIHKLGRRWGPNVQRLACIKKHLKSQGITMDELPLIGGCELDLACFFRLINEMGGMQQVTDLK KWNKLADMLRIPRTAQDRLAKLQEAYCQYLLSYDSLSPEEHRRLEKEVLMEKEILEKRKGPLEGHTENDHHKFHP LPRFEPKNGLIHGVAPRNGFRSKLKEVGQAQLKTGRRRLFAQEKEVVKEEEEDKGVLNDFHKCIYKGRSVSLTTF YRTARNIMSMCFSKEPAPAEIEQEYWRLVEEKDCHVAVHCGKVDTNTHGSGFPVGKSEPFSRHGWNLTVLPNNTG SILRHLGAVPGVTIPWLNIGMVFSTSCWSRDQNHLPYIDYLHTGADCIWYCIPAEEENKLEDVVHTLLQANGTPG LQMLESNVMISPEVLCKEGIKVHRTVQQSGQFVVCFPGSFVSKVCCGYSVSETVHFATTQWTSMGFETAKEMKRR HIAKPFSMEKLLYQIAQAEAKKENGPTLSTISALLDELRDTELRQRRQLFEAGLHSSARYGSHDGSSTVADGKKK PRKWLQLETSERRCQICQHLCYLSMVVQENENVVFCLECALRHVEKQKSCRGLKLMYRYDEEQIISLVNQICGKV SGKNGSIENCLSKPTPKRGPRKRATVDVPPSRLSASSSSKSASSSS

PCT/US2003/028547

2221/6881 FIGURE 2041

PCT/US2003/028547

FIGURE 2042

PCT/US2003/028547

FIGURE 2043

MGAYKYIQELWRKKQSDVMRFLLRVRCWQYRQLSALHRAPRPTRPDKARRLGYKAKQGYVIYRIRVRRGGRNQLK FARSLQSVAEERVGRHCGALRVLNSYWVGEDSTYKFFEVILIDPFHKAIRRNPDTQWITKPVHKHREMRGLTSAG RKSRGLGKGHKFHHTIGGSRRAAWRRRNTLQLHRYR WO 2004/030615 PCT/US2003/028547

2224/6881 FIGURE 2044A

CCGACCAACACCCAGCTCCGACGCAGCTCCTCTGCGCCCTTGCGCCCTCCGAGCCACAGCTTTCCTCC CGCTCCTGCCCCGGCCCGTCGCCGTCTCCGCGCTCGCAGCGGCCTCGGGAGGGCCCAGGTAGCGAGCAGCGACC TCGCGAGCCTTCCGCACTCCCGCCCGGTTCCCCGGCCGTCCGCCTATCCTTGGCCCCCTCCGCTTTCTCCGCGCC GGCCGCCTCGCTTATGCCTCGGCGCTGAGCCGCTCTCCCGATTGCCCGCCGACATGAGCTGCAACGGAGGCTCC CACCGCGGATCAACACTCTGGGCCGCATGATCCGCGCCGAGTCTGGCCCGGACCTGCGCTACGAGGTGACCAGC GGCGGCGGGGGCACCAGCAGGATGTACTATTCTCGGCGCGCGTGATCACCGACCAGAACTCGGACGGCTACTGT CAAACCGGCACGATGTCCAGGCACCAGAACCAGAACACCATCCAGGAGCTGCTGCAGAACTGCTCCGACTGCTTG ATGCGAGCAGAGCTCATCGTGCAGCCTGAATTGAAGTATGGAGATGGAATACAACTGACTCGGAGTCGAGAATTG GATGAGTGTTTTGCCCAGGCCAATGACCAAATGGAAATCCTCGACAGCTTGATCAGAGAGATGCGGCAGATGGGC CAGCCCTGTGATGCTTACCAGAAAAGGCTTCTTCAGCTCCAAGAGCAAATGCGAGCCCTTTATAAAGCCATCAGT TTCACCAAACATGTCACCAGTGAATGTTTGGGGTGGATGAGGCAGCAAAGGGCGGAGATGGACATGGTGGCCTGG GGTGTGGACCTGGCCTCAGTGGAGCAGCACATTAACAGCCACCGGGGCATCCACAACTCCATCGGCGACTATCGC TGGCAGCTGGACAAAATCAAAGCCGACCTGCGCGAGAAATCTGCTATCTACCAGTTGGAGGAGGAGTATGAAAAC CTGCTGAAAGCGTCCTTTGAGAGGATGGATCACCTGCGACAGCTGCAGAACATCATTCAGGCCACGTCCAGGGAG ATCATGTGGATCAATGACTGCGAGGAGGAGGAGCTGCTGTACGACTGGAGCGACAAGAACACCAACATCGCTCAG AAACAGGAGGCCTTCTCCATACGCATGAGTCAACTGGAAGTTAAAGAAAAAGAGCTCAATAAGCTGAAACAAGAA AGTGACCAACTTGTCCTCAATCAGCATCCAGCTTCAGACAAAATTGAGGCCTATATGGACACTCTGCAGACGCAG GAAGAGGCGCAGTCTACTGAAGCATACCTGAAGGGGCTCCAGGACTCCATCAGGAAGAAGTACCCCTGCGACAAG AACATGCCCCTGCAGCACCTGCTGGAACAGATCAAGGAGCTGGAGAAAAGAACGAGAGAAAAATCCTTGAATACAAG CGTCAGGTGCAGAACTTGGTAAACAAGTCTAAGAAGATTGTACAGCTGAAGCCTCGTAACCCAGACTACAGAAGC ATCCTGAAGGACAACGAGCGCAGCAAGTGGTACGTGACGGGCCCGGGAGGCGTTGACATGCTTGTTCCCTCT GTGGGGCTGATCATCCCTCCGAACCCACTGGCCGTGGACCTCTCTTGCAAGATTGAGCAGTACTACGAAGCC ATCTTGGCTCTGTGGAACCAGCTCTACATCAACATGAAGAGCCTGGTGTCCTGGCACTACTGCATGATTGACATA GAGAAGATCAGGGCCATGACAATCGCCAAGCTGAAAACAATGCGGCAGGAAGATTACATGAAGACGATAGCCGAC CTTGAGTTACATTACCAAGAGTTCATCAGAAATAGCCAAGGCTCAGAGATGTTTGGAGATGATGACAAGCGGAAA ATACAGTCTCAGCTCACCGATGCCCAGAAGCATTACCAGACCCTGGTCATTCAGCTCCCTGGCTATCCCCAGCAC CAGACAGTGACCACAACTGAAATCACTCATCATGGAACCTGCCAAGATGTCAACCATAATAAAGTAATTGAAACC GAGGGCAGGATGACTCTCAAAAACCTCCCTCTAGCAGACCAGGGATCTTCTCACCACATCACAGTGAAAATTAAC GAGCTTAAGAGTGTGCAGAATGATTCACAAGCAATTGCTGAGGTTCTCAACCAGCTTAAAGATATGCTTGCCAAC TTCAGAGGTTCTGAAAAGTACTGCTATTTACAGAATGAAGTATTTGGACTATTTCAGAAACTGGAAAATATCAAT GGTGTTACAGATGGCTACTTAAATAGCTTATGCACAGTAAGGGCACTGCTCCAGGCTATTCTCCAAACAGAAGAC ATGTTAAAGGTTTATGAAGCCAGGCTCACTGAGGAGGAAACTGTCTGCCTGGACCTGGATAAAGTGGAAGCTTAC CGCTGTGGACTGAAGAAAATAAAAATGACTTGAACTTGAAGAGTCGTTGTTGGCCACTATGAAGACAGAACTA CAGAAAGCCCAGCAGATCCACTCTCAGACTTCACAGCAGTATCCACTTTATGATCTGGACTTGGGCAAGTTCGGT AAACAAATCAAGCAATTGAGGAATTATCGTGATAACTATCAGGCTTTCTGCAAGTGGCTCTATGATGCTAAACGC CGCCAGGATTCCTTAGAATCCATGAAATTTGGAGATTCCAACACAGTCATGCGGTTTTTGAATGAGCAGAAGAAC TTGCACAGTGAAATATCTGGCAAACGAGACAAATCAGAGGAAGTACAAAAAATTGCTGAACTTTGCGCCAATTCA ATTAAGGATTATGAGCTCCAGCTGGCCTCATACACCTCAGGACTGGAAACTCTGCTGAACATACCTATCAAGAGG ACCATGATTCAGTCCCCTTCTGGGGTGATTCTGCAAGAGGCTGCAGATGTTCATGCTCGGTACATTGAACTACTT ACAAGATCTGGAGACTATTACAGGTTCTTAAGTGAGATGCTGAAGAGTTTGGAAGATCTGAAGCTGAAAAATACC AAGATCGAAGTTTTGGAAGAGGAGCTCAGACTGGCCCGAGATGCCAACTCGGAAAACTGTAATAAGAACAAATTC CTGGATCAGAACCTGCAGAAATACCAGGCAGAGTGTTCCCAGTTCAAAGCGAAGCTTGCGAGCCTGGAGGAGCTG AAGAGACAGGCTGAGCTGGATGGGAAGTCGGCTAAGCAAAATCTAGACAAGTGCTACGGCCAAATAAAAGAACTC

PCT/US2003/028547

2225/6881 FIGURE 2044B

AATGAGAAGATCACCCGACTGACTTATGAGATTGAAGATGAAAAGAGAAAAAATCTGTGGAAGACAGATTT TTAGAGTCTGAGAAAGCCATCAAGGAGAAGGAGTACGAGATTGAAAGGTTGAGGGTTCTACTGCAGGAAGAAGGC ACCCGGAAGAGAGAATATGAAAATGAGCTGGCAAAGGTAAGAAACCACTATAATGAGGAGATGAGTAATTTAAGG AACAAGTATGAAACAGAGATTAACATTACGAAGACCACCATCAAGGAGATATCCATGCAAAAAAGAGGATGATTCC AAAAATCTTAGAAACCAGCTTGATAGACTTTCAAGGGAAAATCGAGATCTGAAGGATGAAATTGTCAGGCTCAAT GACAGCATCTTGCAGGCCACTGAGCAGCGAAGGCGAGCTGAAGAAAACGCCCTTCAGCAAAAAGGCCTGTGGCTCT GAGATAATGCAGAAGAAGCAGCATCTGGAGATAGAACTGAAGCAGGTCATGCAGCAGCGCTCTGAGGACAATGCC CGGCACAAGCAGTCCCTGGAGGAGGCTGCCAAGACCATTCAGGACAAAAATAAGGAGATCGAGAGACTCAAAGCT GAGTTTCAGGAGGAGGCCAAGCGCCGCTGGGAATATGAAAATGAACTGAGTAAGGTAAGAAAACAATTATGATGAG GAGATCATTAGCTTAAAAAATCAGTTTGAGACCGAGATCAACATCACCAAGACCACCATCCACCAGCTCACCATG CAGAAGGAAGAGGATACCAGTGGCTACCGGGCTCAGATAGACAATCTCACCCGAGAAAACAGGAGCTTATCTGAA GAAATAAAGAGGCTGAAGAACACTCTAACCCAGACCACAGAGAATCTCAGGAGGGTGGAAGAAGACATCCAACAG CAAAAGGCCACTGGCTCTGAGGTGTCTCAGAGGAAACAGCAGCTGGAGGTTGAGCTGAGACAAGTCACTCAGATG CGAACAGAGGAGAGCGTAAGATATAAGCAATCTCTTGATGATGCTGCCAAAACCATCCAGGATAAAAACAAGGAG ATAGAAAGGTTAAAACAACTGATCGACAAAGAAACAAATGACCGGAAATGCCTGGAAGATGAAAACGCGAAGATTA CAAGAACTGACACGCCTGAGGATCGACTATGAAAGGGTTTCCCAGGAGAGGACTGTGAAGGACCAGGATATCACG CGGTTCCAGAACTCTCTGAAAGAGCTGCAGCTGCAGAAGCAGAAGGTGGAAGAGGAGCTGAATCGGCTGAAGAGG ACCGCGTCAGAAGACTCCTGCAAGAGGAAGAAGCTGGAGGAAGAGCTGGAAGGCATGAGGAGGTCGCTGAAGGAG CAAGCCATCAAAATCACCAACCTGACCCAGCAGCTGGAGCAGCATCCATTGTTAAGAAGAGGAGTGAGGATGAC $\tt CTCCGGCAGCAGGAGGGCCTGCTGGATGGCCACCTGAGGGAAAAGCAGAGGACCCAGGAAGAGCTGAGGAGGCTC$ TCTTCTGAGGTCGAGGCCCTGAGGCGGCAGTTACTCCAGGAACAGGAAAGTGTCAAACAAGCTCACTTGAGGAAT GAGCATTTCCAGAAGGCGATAGAAGATAAAAGCAGAAGCTTAAATGAAAGCAAAATAGAAATTGAGAGGCTGCAG TCTCTCACAGAGAACCTGACCAAGGAGCACTTGATGTTAGAAGAAGAACTGCGGAACCTGAGGCTGGAGTACGAT GACCTGAGGAGGACGAAGCGAAGCGGACAGTGATAAAAATGCAACCATCTTGGAACTAAGGAGCCAGCTGCAG GAAATTGAGAAATTCCAAAAGCAGGCTTTAGAGGCATCTAATAGGATTCAGGAATCAAAGAATCAGTGTACTCAG GTGGTACAGGAAAGAGAGAGCCTTCTGGTGAAAATCAAAGTCCTGGAGCAAGACAAGGCAAGGCTGCAGAGGCTG GAGGATGAGCTGAATCGTGCAAAATCAACTCTAGAGGCAGAAACCAGGGTGAAACAGCGCCTGGAGTGTGAGAAA CAGCAAATTCAGAATGACCTGAATCAGTGGAAGACTCAATATTCCCGCAAGGAGGAGGCTATTAGGAAGATAGAA TCGGAAAGAGAAAAGAGTGAGAGAGAAGAACAGTCTTAGGAGTGAGATCGAAAGACTCCAAGCAGAGATCAAG AGAATTGAAGAGGGTGCAGGCGTAAGCTGGAGGATTCTACCAGGGAGACACAGTCACAGTTAGAAACAGAACGC TCCCGATATCAGAGGGAGATTGATAAACTCAGACAGCGCCCATATGGGTCCCATCGAGAGACCCAGACTGAGTGT GAGTGGACCGTTGACACCTCCAAGCTGGTGTTTGATGGGCTGAGGAAGAAGGTGACAGCAATGCAGCTCTATGAG TGTCAGCTGATCGACAAAACATCTTGGACAAACTATTGAAGGGGAAGAAGTCAGTGGAAGAAGTTGCTTCTGAA ATCCAGCCATTCCTTCGGGGTGCAGGATCTATCGCTGGAGCATCTGCTTCTCCTAAGGAAAAATACTCTTTGGTA GAGGCCAAGAGAAAATTAATCAGCCCAGAATCCACAGTCATGCTTCTGGAGGCCCAGGCAGCTACAGGTGGT ATAATTGATCCCCATCGGAATGAGAAGCTGACTGTCGACAGTGCCATAGCTCGGGACCTCATTGACTTCGATGAC CGTCAGCAGATATATGCAGCAGAAAAAGCTATCACTGGTTTTGATGATCCATTTTCAGGCAAGACAGTATCTGTT TCAGAAGCCATCAAGAAAAATTTGATTGATAGAGAAACCGGAATGCGCCTGCTGGAAGCCCAGATTGCTTCAGGG TTGTATCGATCCCTGAATGATCCCCGAGATAGTCAGAAAAACTTTGTGGATCCAGTCACCAAAAAAGAAGGTCAGT TACGTGCAGCTGAAGGAACGGTGCAGAATCGAACCACATACTGGTCTGCTCTTGCTTTCAGTACAGAAGAAGAAGC ATGTCCTTCCAAGGAATCAGACAACCTGTGACCGTCACTGAGCTAGTAGATTCTGGTATATTGAGACCGTCCACT GTCAATGAACTGGAATCTGGTCAGATTTCTTATGACGAGGTTGGTGAGAGAATTAAGGACTTCCTCCAGGGTTCA AGCTGCATAGCAGGCATATACAATGAGACCACAAAACAGAAGCTTGGCATTTATGAGGCCATGAAAATTGGCTTA GTCCGACCTGGTACTGCTCTGGAGTTGCTGGAAGCCCAAGCAGCTACTGGCTTTATAGTGGATCCTGTTAGCAAC

PCT/US2003/028547

2226/6881 FIGURE 2044C

TTGAGGTTACCAGTGGAGGAAGCCTACAAGAGAGGTCTGGTGGGCATTGAGTTCAAAGAGAAGCTCCTGTCTGCA GAACGAGCTGTCACTGGGTATAATGATCCTGAAACAGGAAACATCATCTCTTTGTTCCAAGCCATGAATAAGGAA CTCATCGAAAAGGGCCACGGTATTCGCTTATTAGAAGCACAGATCGCAACCGGGGGGATCATTGACCCAAAGGAG AGCCATCGTTTACCAGTTGACATAGCATATAAGAGGGGCTATTTCAATGAGGAACTCAGTGAGATTCTCTCAGAT AAGAATACCCTCAGGAAGCGTAGAGTGGTCATAGTTGACCCAGAAACCAATAAAGAAATGTCTGTTCAGGAGGCC TACAAGAAGGCCTAATTGATTATGAAACCTTCAAAGAACTGTGTGAGCAGGAATGTGAATGGGAAGAAATAACC GCTGACATGATCTCCTTGAAAAATGGTGTCGGCACCAGCAGCAGCATGGCAGTGGTGTCAGCGATGATGTTTTT AGCAGCTCCCGACATGAATCAGTAAGATTTCCACCATATCCAGCGTCAGGAATTTAACCATAAGGAGCAGC TCTTTTTCAGACACCCTGGAAGAATCGAGCCCCATTGCAGCCATCTTTGACACAGAAAACCTGGAGAAAATCTCC ATTACAGAAGGTATAGAGCGGGGCATCGTTGACAGCATCACGGGTCAGAGGCTTCTGGAGGCTCAGGCCTGCACA GGTGGCATCATCCACCCAACCACGGGCCAGAAGCTGTCACTTCAGGACGCAGTCTCCCAGGGTGTGATTGACCAA GACATGGCCACCAGGCTGAAGCCTGCTCAGAAAGCCTTCATAGGCTTCGAGGGTGTGAAGGGAAAGAAGAAGATG TCAGCAGCAGAGGCAGTGAAAGAAAATGGCTCCCGTATGAGGCTGGCCAGCGCTTCCTGGAGTTCCAGTACCTC ACGGGAGGTCTTGTTGACCCGGAAGTGCATGGGAGGATAAGCACCGAAGAAGCCATCCGGAAGGGGTTCATAGAT GGCCGCGCGCACAGAGGCTGCAAGACACCAGCAGCTATGCCAAAATCCTGACCTGCCCCAAAACCAAATTAAAA ATATCCTATAAGGATGCCATAAATCGCTCCATGGTAGAAGATATCACTGGGCTGCGCCTTCTGGAAGCCGCCTCC GTGTCGTCCAAGGGCTTACCCAGCCCTTACAACATGTCTTCGGCTCCGGGGTCCCGCTCCGGCTCCCGCTCGGGA. TCTCGCTCCGGATCTCGCTCCGGGTCCCGCAGTGGGTCCCGGAGAGCATTTGACGCCACAGGGAATTCTTCC TACTCTTATTCCTACTCATTTAGCAGTAGTTCTATTGGGCACTAGTAGTCAGTTGGGAGTGGTTGCTATACCTTG ACTTCATTTATATGAATTTCCACTTTATTAAATAATAGAAAAGAAAATCCCGGTGCTTGCAGTAGAGTGATAGGA CATTCTATGCTTACAGAAAATATAGCCATGATTGAAATCAAATAGTAAAGGCTGTTCTGGCTTTTTATCTTCTTA GCTCATCTTAAATAAGCAGTACACTTGGATGCAGTGCGTCTGAAGTGCTAATCAGTTGTAACAATAGCACAAATC GAACTTAGGATTTGTTTCTTCTCTTCTGTGTTTCGATTTTTGATCAATTCTTTAATTTTGGAAGCCTATAATACA GTTTTCTATTCTTGGAGATAAAAATTAAATGGATCACTGATATTTTAGTCATTCTGCTTCTCATCTAAATATTTC CATATTCTGTATTAGGAGAAAATTACCCTCCCAGCACCAGCCCCCTCTCAAACCCCAACCCAAAACCAAGCAT TTTGGAATGAGTCTCCTTTAGTTTCAGAGTGTGGATTGTATAACCCATATACTCTTCGATGTACTTTTTGGTTT GGTATTAATTTGACTGTGCATGACAGCGGCAATCTTTTCTTTGGTCAAAGTTTTCTGTTTATTTTGCTTGTCATA TTCGATGTACTTTAAGGTGTCTTTATGAAGTTTGCTATTCTGGCAATAAACTTTTAGACTTTT

PCT/US2003/028547

FIGURE 2045

PCT/US2003/028547

FIGURE 2046

MNEFLTQELAEDGYSGVEMRVTPTRTEIIVLATRTQNVLGEKGRRIRELTAVVQKRFGSPEGSVELYAEEVATRG LCAIAQAESLPYKLLGGLAVRRACYGVSRFIMETGAKGCEVVVSGKL

PCT/US2003/028547

2229/6881 FIGURE 2047

ATGACCAGGTTCATCATCGCCTCTCCCCCCTCTACCTTTCTCCCTGGTTTCCATAGAGCAGAAATCTGGGTC AAGGTGGAGTGCATTGGATCAAGAGTTGCTATGATTTGGGAAAAGCTCTGCAGGATAAGTCGAATAAAATCAGAC CTTGCAGAAACTCAATCTGGCCCCTGGGAACTCTCCGGTGTGGAGCTGGAGGAAAAACCAGTACAGTACTCTCTC AGGAAAACAAGCTCAGAGGCGGAATCAACAAGACAGCTGACGAACACCTCTTCAAGAGAGGCCAGGGTCTCA AGCTCAAGTGGCCAAGGCAAGACGGGTCAAAGTCAGAGTGGTGGTCACAGTCCTGGAGGTGGCAAGAAGGATGAC AAGGACAAGAAAAAGAAATATGAACCTCCTGTACCAACTGGAGTGGGGAAAAAGAAGAAAACAAAAGGATCAGAT GTTGCCAGCAAACTGCCACTGGAATCGGGAACAAATGGAACCATTAGAAGAAAAGCAAGAGGAGGAAAGATCAAA GGTGGACGATCTGAGGGGACCCCGATGTCAGTAGGAACCTTGGAAGAGATCAATGACAGTCATGCCATCGTGTCT ACATCTGTGGGCTCAGGACACTACGCCAACATTCTTTCATTTGTAGACAAGGATCTGCTGGCAACTGGCTGCTCA AAGGTGGAAAAGGTCCCCCAGGAGACCTATGCCAATACTGGGAGGTTGGATAATCAAATTCAGGAAATTAAGGAA TCTGTGGAGCTTCCTCTCACCCATGCTGAACATTATGAAGAGATGGGTATAAAGCCTCCTAAGGGGGTCATTCTC TATGGTCCACCTGGCATAGTTAAAACCTTGCTAGCCAAAGCGGTAGCAAACCAAACCTCAGCCACTTTCTTGAAA GTGGTTGGCTCTGAACTTATTCAGAAGTACCTAGGTGATGGGCCCAAACTTGTACGGGAATTGTTTCAAGTTGCT GGAGAACATGCACCATCCATCGTGTTTACTGATGAAACTGACGCCATTGGGACAAAAAGATATGACTCAAATTCT GGTGAAGCTGGTCTGATGGCCTTAAGAGAACGTAGAATGAAAGCAACAAATGAAGACTTCAAAAAATCTAAAGAA AATGTTCTTTATAAGAAACAGGAAGGCACCCCTGAGGGGCTGTCTCTCTAG

PCT/US2003/028547

FIGURE 2048

MSVGTLEEINDSHAIVSTSVGSGHYANILSFVDKDLLATGCSVLLNHKVHAMRGVLMDDVDPLVTVMKVEKVPQE TYANTGRLDNQIQEIKESVELPLTHAEHYEEMGIKPPKGVILYGPPGIVKTLLAKAVANQTSATFLKVVGSELIQ KYLGDGPKLVRELFQVAGEHAPSIVFTDETDAIGTKRYDSNSGEAGLMALRERRMKATNEDFKKSKENVLYKKQE GTPEGLSL

PCT/US2003/028547

2231/6881 FIGURE 2049

GGGGGCTCGGGCTGGGGCGCCTGTGCCGGCCGCCCCACCCTCCTTGCATAAAAGCCGGAGCCCGCGGGGC GACCCAGACGCCGCCGGACCAGGAGGACGCTGACGAGGCACCATGCGTGAGATCGTGCACATCCAGGCGGGCCAG TGCGGCAACCAGATCGGCGCCAAGTTTTGGGAGGTCATCAGTGATGAGCATGGGATTGACCCCACTGGCAGTTAC CATGGAGACAGTGATTTGCAGCTGGAGAGAATCAATGTTTACTACAATGAAGCCACTGGTAACAAATATGTTCCT CGGGCCATCCTCGTGGATCTGGAGCCAGGCACGATGGATTCGGTTAGGTCTGGACCATTCGGCCAGATCTTCAGA CCAGACAATTTCGTGTTTGGCCAGAGTGGAGCCGGGAATAACTGGGCCAAGGGCCACTACACAGAGGGAGCCGAG $\verb|CTGGTCGACTCGGTCCTGGATGTGGTGAGGAGGAGTCAGAGGAGCTGTGACTGTCTCCAGGGCTTCCAGCTGACC| \\$ CACTCTCTGGGGGGCGCACGGGGTCCGGGATGGGCACCCTGCTCATCAGCAAGATCCGGGAAGAGTACCCAGAC CGCATCATGAACACCTTCAGCGTCATGCCCTCACCCAAGGTGTCAGACACGGTGGTGGAGCCCTACAACGCCACC CTCTCGGTCCACCAGCTGGTGGAAAACACAGATGAAACCTACTGCATTGACAACGAGGCCCTGTATGACATCTGC TTCCGCACCTGAAGCTGACCACCCCACCTACGGGGACCTCAACCACCTGGTGTCGGCCACCATGAGCGGGGTC ACCACCTGCCTGCGCTTCCCGGGCCAGCTGAACGCAGACCTGCGCAAGCTGGCGGTGAACATGGTGCCCTTCCCT CCCGAGCTCACCCAGCAGATGTTCGACTCCAAGAACATGATGGCCGCCTGCGACCCGCCGCCACGGCCGCTACCTG ACGGTGGCTGCCATCTTCCGGGGCCGCATGTCCATGAAGGAGGTGGACGAGCAGATGCTCAACGTGCAGAACAAG AACAGCAGCTACTTCGTGGAGTGGATCCCCAACAACGTGAAGACGGCCGTGTGCGACATCCCGCCCCGCGGCCTG AAGATGTCGGCCACCTTCATCGGCAACAGCACGGCCATCCAGGAGCTGTTCAAGCGCATCTCCGAGCAGTTCACG GCCATGTTCCGGCGCAAGGCCTTCCTGCACTGGTACACGGGCGAGGGCATGGACGAGATGGAGTTCACCGAGGCC GAGAGCAACATGAACGACCTGGTGTCCGAGTACCAGCAGTACCAGGACGCCACGGCCGACGAACAAGGGGAGTTC GAGGAGGAGGAGGAGGAGGAGGCGTAGATGCCCCCGCGAGACGGGTTAGGGAAAGCGGAGGAGGAAAGCGAG TTGAGATATTTCTGAATTACTGTTGTAATGGCTAAAATCACATAAACGTTTGTGTCGG

PCT/US2003/028547

FIGURE 2050

GCCCGCCGGTCCACGCGCACCGCTCCGAGGGCCAGCGCCACCCGCTCCGCAGCCGGCACCATCCGCAGAGATC GTGCACATCCAGGCGGGCCAGTGCGGCAACCAGATCGGCGCCCAAGTTTTGGGAGGTCATCAGCGATGAGCATGGG ATCGACCCCACAGGCAGTTACCATGGAGACAGTGACTTGCAGCTGGAGAGAATCAACGTGTACTACAATGAGGCT GCTGGTAACAAATATGTACCTCGGGCCATCCTGGTGGATCTGGAGCCTGGCACCATGGACTCTGTCAGGTCTGGA CCCTTCGGCCAGATCTTCAGACCAGACAACTTCGTGTTCGGCCAGAGTGGAGCCGGGAATAACTGGGCCAAGGGC CTCCAGGGCTTCCAGCTGACCCACTCTCTGGGGGGGCGCACGGGGTCCGGGATGGGCACCCTGCTCATCAGCAAG ATCCGGGAAGAGTACCCAGACCGCATCATGAACACCTTCAGCGTCATGCCCTCACCCAAGGTGTCAGACACGGTG GTGGAGCCCTACAACGCCACCCTCTCGGTCCACCAGCTGGTGGAAAACACAGATGAAACCTACTCCATTGATAAC GAGGCCCTGTATGACATCTGCTTCCGCACCCTGAAGCTGACCACCCCACCTACGGGGACCTCAACCACCTGGTG TCGGCCACCATGAGCGGGGTCACCACCTGCCTGCGCTTCCCGGGCCAGCTGAACGCAGACCTGCGCAAGCTGGCG GTGAACATGGTGCCCTTCCCTCGCCTGCACTTCTTCATGCCCGGCTTCGCGCCCCTGACCAGCCGGGGCAGCCAG CAGTACCGGGCGCTCACGGTGCCCGAGCTCACCCAGCAGATGTTCGACTCCAAGAACATGATGGCCGCCTGCGAC CCGCGCCACGCCGCTACCTGACGGTGCCTGCCATCTTCCGGGGCCGCATGTCCATGAAGGAGGTGGACGAGCAG ATGCTCAACGTGCAGAACAAGAACAGCAGCTACTTCGTGGAGTGGATCCCCAACAACGTGAAGACGCCGTGTGC GACATCCCGCCCCGCGGCCTGAAGATGTCGGCCACCTTCATCGGCAACAGCACGGCCATCCAGGAGCTGTTCAAG CGCATCTCCGAGCAGTTCACGGCCATGTTCCGGCGCAAGGCCTTCCTGCACTGGTACACGGGCGAGGGCATGGAC GAGATGGAGTTCACCGAGGCCGAGAGCAACATGAACGACCTGGTGTCCGAGTACCAGCAGTACCAGGACGCCACG GCCGACGAACAAGGGGAGTTCGAGGAGGAGGAGGAGGACGAGGCT<u>TAA</u>AAACTTCTCAGATCAATCGTGCAT CCTTAGTGAACTTCTGTTGTCCTCAAGCATGGTCTTTCTACTTGTAAACTATGGTGCTCAGTTTTGCCTCTGTTA GAAATTCACACTGTTGATGTAATGATGTGGAACTCCTCTAAAAATTACAGTATTGTCTGTGAAGGTATCTATACT AATAAAAAGCATGTGTAG

PCT/US2003/028547

2233/6881 FIGURE 2051

MREIVHIQAGQCGNQIGAKFWEVISDEHGIDPTGSYHGDSDLQLERINVYYNEAAGNKYVPRAILVDLEPGTMDS VRSGPFGQIFRPDNFVFGQSGAGNNWAKGHYTEGAELVDSVLDVVRKESESCDCLQGFQLTHSLGGGTGSGMGTL LISKIREEYPDRIMNTFSVMPSPKVSDTVVEPYNATLSVHQLVENTDETYSIDNEALYDICFRTLKLTTPTYGDL NHLVSATMSGVTTCLRFPGQLNADLRKLAVNMVPFPRLHFFMPGFAPLTSRGSQQYRALTVPELTQQMFDSKNMM AACDPRHGRYLTVAAIFRGRMSMKEVDEQMLNVQNKNSSYFVEWIPNNVKTAVCDIPPRGLKMSATFIGNSTAIQ ELFKRISEQFTAMFRRKAFLHWYTGEGMDEMEFTEAESNMNDLVSEYQQYQDATADEQGEFEEEEGEDEA

PCT/US2003/028547

2234/6881 FIGURE 2052

ATGGCACACGCACGCTGCCCCAGCGCCCGGGGCTCCGGGGACGCGAGATGGGCAAGCCCAGGAACGTG GCGCTCATCACCGGTATCACAGGCCAGGATGGTTCCTACCTGGCTGAGTTCCTGCTGGAGAAAGGCTATGAGGTC CATGGAATTGTACGGCGGTCCAGTTCATTTAATACGGGTCGAATTGAGCATCTGTATAAGAATCCCCAGGCTCAC ATTGAAGGAAACATGAAGTTGCACTATGGCGATCTCACTGACAGTACCTGCCTTGTGAAGATCATTAATGAAGTA AAGCCCACAGAGATCTACAACCTTGGAGCCCAGAGCCACGTCAAAATTTCCTTTGACCTCGCTGAGTACACTGCG GACGTTGACGGAGTTGGCACTCTACGACTTCTAGATGCAGTTAAGACTTGTGGCCTTATCAACTCTGTGAAGTTC TACCAAGCCTCAACAAGTGAACTTTATGGGAAAGTGCAGGAAATACCCCAGAAGGAGACCACCCCTTTCTATCCC CGGTCACCCTATGGGGCAGCAAAACTCTATGCCTATTGGATTGTGGTGAACTTCCGTGAGGCGTATAATCTCTTT GCAGTGAACGGCATTCTCTTCAATCATGAGAGTCCCAGAAGAGGGGGCTAATTTCGTTACTCGAAAAATTAGCCGG TCAGTAGCTAAGATTTACCTTGGACAACTGGAATGTTTCAGTTTGGGAAATCTGGATGCCAAACGAGATTGGGGC CATGCCAAGGACTATGTGGAGGCTATGTGGTTGATGTTGCAGAATGATGAGCCGGAGGACTTCGTTATAGCTACT GGGGAGGTCCATAGTGTCCGGGAATTTGTCGAGAAATCATTCTTGCACATTGGAAAAACCATTGTGTGGGAAGGA AAGAATGAAATGAAGTGGGCAGATGTAAAGAGCCGGCAAAGTTCACGTGACTGTGGATCTCAAGTACTACCGG CCAACTGAAGTGGACTTTCTGCAGGGCGACTGCACCAAAGCGAAACAGAAGCTGAACTGGAAGCCCCGGGTCGCT $\tt TTCGATGAGCTGGTGAGGGAGATGGTGCACGCCGACGTGGAGCTCATGAGGACAAACCCCAATGCC\underline{TGA}_{GCAGCG}$ CCTCGGAGCCCGCCCGCCCTCCGGCTACAATCCCCGCAGAGTCTCCGGTGCAGACGCGCTGCGGGGATGGGGAG CGGCGTGCCAATCTGCGGGTCCCCTGCGGCCCCTGCTGCCGCTGTCCCGGCCGCAAGAGCGGGGCCGCCC CGCCGAGGTTTGTAGCAGCCGGGATGTGACCCTCCAGGGTTTGGGTCGCTTTGCGTTTGTCGAAGCCTCCTCTGA ATGGCTTTGTGAAATCAAGATGTTTTAATCACATTCACTTTACTTGAAATTATGTTGTTACACAACAAATTGTGG GGCCTTCAAATTGTTTTTCC

PCT/US2003/028547

FIGURE 2053

MAHAPARCPSARGSGDGEMGKPRNVALITGITGQDGSYLAEFLLEKGYEVHGIVRRSSSFNTGRIEHLYKNPQAH IEGNMKLHYGDLTDSTCLVKIINEVKPTEIYNLGAQSHVKISFDLAEYTADVDGVGTLRLLDAVKTCGLINSVKF YQASTSELYGKVQEIPQKETTPFYPRSPYGAAKLYAYWIVVNFREAYNLFAVNGILFNHESPRRGANFVTRKISR SVAKIYLGQLECFSLGNLDAKRDWGHAKDYVEAMWLMLQNDEPEDFVIATGEVHSVREFVEKSFLHIGKTIVWEG KNENEVGRCKETGKVHVTVDLKYYRPTEVDFLQGDCTKAKQKLNWKPRVAFDELVREMVHADVELMRTNPNA

PCT/US2003/028547

FIGURE 2054A

CGCCGCGGCCCGGTACCAACGGGTGGTCTCGCCGAGGGAGCTGTCGTGCCTCGTGGTCCCGGGACTGCAGTGGTG TGCGCTCTCGGCGCGTGGCGCTAGGCATGGCGATGGATCAAGTAAACGCGCTGTGCGAGCAGCTGGTGAAAGCGG TGACGGTCATGATGGACCCCAACTCCACCCAGCGCTACCGGCTGGAAGCCCTCAAGTTTTGTGAGGAGTTTAAAG AAAAGTGTCCTATCTGTGTCCCCTGTGGCTTGAGGTTGGCTGAGAAAACACAAGTTGCCATCGTCAGACATTTTG GCCTTCAGATCCTGGAACACGTTGTCAAGTTTCGGTGGAACGCCATGTCTCGATTGGAGAAGGTGTATCTGAAGA ACAGTGTCATGGAGCTGATTGCAAATGGAACATTGAACATTTTGGAAGAGGAGAACCATATTAAAGATGCTCTGT CTCGAATTGTAGTGGAAATGATCAAGCGAGAGTGGCCACAGCATTGGCCTGACATGCTAATAGAATTGGACACTC TTTCCAAACAAGGGGAAACACAGACAGAATTGGTGATGTTTATCCTTTTGCGACTGGCAGAGGATGTAGTGACTT TTCAGACACTTCCCCCTCAAAGAAGAAGGGACATCCAGCAAACATTAACCCAGAACATGGAAAGGATCTTCAGTT TTCTGCTTAACACACTTCAAGAAAATGTAAACAAGTATCAGCAAGTGAAGACAGATACTTCTCAGGAGTCAAAGG CGCAAGCAAACTGTCGAGTAGGAGTTGCAGCACTGAATACTCTAGCAGGCTATATTGACTGGGTGTCTATGAGTC CCGCTGAGTGTCTCTCATTGCAGTCAGCAGAAAAGGCAAGTTGGAAGACCGGAAGCCCTTGATGGTCTTATTTG GAGATGTTGCCATGCATTATATACTCTCCGCCGCACAGACTGCTGATGGAGGAGGTTTGGTAGAAAAACACTACG TCTTTCTGAAGAGGCTCTGTCAGGTGTTGTGTGCGCTGGGCAATCAGCTGTGCATTGCTGGGTGCAGATTCTG ATGTAGAAACACCATCAAACTTTGGAAAATACCTGGAATCTTTTCTTGCTTTCACAACCCATCCAAGTCAGTTTC TACGCTCTTCAACTCAGATGACTTGGGGAGCCCTCTTCAGGCATGAAATCCTGTCCCGTGATCCTTTGCTATTAG CTAGCTGTGAATATTCTCGGTTTGATTTGATAGCGATGAGGACTTCAATGCTTTCTTCAACTCCTCCCGAGCAC AACAAGGAGAGGTGATGAGGTTGGCATGTCGTTTGGATCCCAAAACTAGCTTCCAGATGGCTGGGGAGTGGCTAA TCTGTTCCGTCTTCTCACCTTCATTCGTGCAGTGGGAAGCCATGACTCTTTTTTTGGAAAGTGTTATCACCCAGA TGTTTCGAACACTAAATAGAGAAGAAATTCCTGTTAATGATGGAATAGAGCTATTGCAGATGGTTCTGAACTTTG ATACCAAGGATCCCTCATCCTGTCCTGCGTCCTTACTAATGTCTCTGCACTCTTTCCATTTGTCACCTACAGAC CAGAGTTCCTGCCCCAGGTCTTCTCTAAGCTATTTTCATCTGTCACTTTTGAAACTGTTGAAGAAAGTAAGGCCC CCAGAACCCGGGCAGTGAGGAATGTGAGGAGGCATGCTTGTTCCTCCATCAAGATGTGTCGTGACTACCCCC AGCTTGTGCTGCCCAATTTTGACATGCTTTATAACCATGTGAAGCAACTCCTCTCCAATGAGCTACTCCTGACAC AAATGGAGAGTGTGCCCTCATGGAAGCCCTGGTTCTCATTAGCAACCAATTTAAGAACTACGAGCGTCAGAAGG TGTTCCTAGAGGAGCTGATGGCACCAGTGGCCAGCATCTGGCTTTCTCAAGACATGCACAGAGTGCTGTCAGATG TTGATGCTTTCATTGCGTATGTGGGTACAGATCAGAAGAGCTGTGACCCAGGCCTGGAGGATCCGTGTGGCTTAA ACCGTGCACGAATGAGCTTTTGTGTATACAGCATTCTGGGTGTGAAACGAACTTGCTGGCCCACTGACCTAG AAGAGGCCAAAGCTGGGGGATTTGTGGTGGGTTATACATCCAGTGGAAATCCAATCTTCCGTAACCCCTGCACAG AGCAGATTCTGAAACTTCTTGACAATTTGCTTGCGCTTATAAGAACCCACAATACATTATATGCACCAGAAATGC TAGCCAAAATGGCAGAGCCTTTCACCAAGGCTCTGGATATGCTTGACGCGGAAAAATCTGCTATATTAGGATTAC CTCAACCTCTTGGAACTCAATGACTCTCCTGTCTTCAAAACCGTCTTGGAAAGAATGCAGCGTTTCTTCTCTA ACCTTGCTACCCAGCTTCTCAGCCCAGCCTTTGTCAACTTGAACAATATTCCTGACTACCGACTCAGACCCATGC TTCGGGTCTTTGTAAAGCCTCTGGTGCTCTTCTGTCCCCCAGAGCACTATGAAGCCCTGGTATCCCCCATCCTCG GACCTCTTTTCACCTACCTCCATATGAGGCTTTCTCAGAAATGGCAAGTTATCAACCAAAGGAGCCTGCTGTGTG GAGAAGATGAGGCTGCAGATGAAAACCCAGAGTCTCAAGAGATGCTGGAGGAGCAACTGGTGAGGATGTTAACCC GAGAAGTCATGGACCTAATCACGGTTTGCTGTGTTTCAAAGAAGGGTGCTGACCACAGTAGTGCTCCCCCAGCAG ATGGAGACGATGAAGAATGATGGCCACAGAGGTCACCCCCTCAGCTATGGCAGAGCTTACAGACCTGGGCAAAT TGTCCTGCCAGAGGACAACCTCACAGCTCTGCTGGCCTCTCCTCAAACAAGTGCTGTCAGGGACACTGCTCGCAG ATGCAGTTACGTGGCTTTTCACCAGTGTGCTGAAAGGCTTACAGATGCACGGGCAGCACGACGGGTGCATGGCTT CCCTGGTCCATCTGGCCTTCCAGATATACGAGGCACTGCGCCCCAGGTACCTGGAGATAAGAGCTGTAATGGAGC CTGACAAGCGCCGAAAGGACCAATTCAAACGCCTCATTGCTGGTTGCATTGGGAAACCCTTGGGAGAGCAGTTCC

WO 2004/030615 PCT/US2003/028547

FIGURE 2054B

TGTCATCTCTTCTTTCCCTTTGTAGCCGATCTCTAGGCCCTTCTTGCACTGCCACCTCACTTTCCACCACTGTCA GCCTGGAAAGAGATCCAGGTCTGGAGCTGGAGAACAGGCCCTGTGCAGGACCAGAAGTAATTATACTAAAGTA TCAAGAAAGGGAGTTAGGGCTTAAACTATTCTGTCTAGATGTCCCAGATAGTTCCCATTCTACTTGGAGATTTGG CTTTTCCAAGAAAGCTAGAGCAGAGCAGCCCTTCTCCCACAAGCCCTCCCACCCCGTGCAGCCACATACCTGT ACAGAATGGTAACTAAGGGTGCTGTGCCCAACCCTGCGACTAGCAAGGCTCGCAGCAAGAGCACAGCCCTCAACT ACTTGTGCCAGAGTTTCTCTTGGACCACTCCAACTCCACTGAGCCCTTTTGCTGCTGGGCTGGCAGGAAACTTT CCCCACTCCCTAAGGGGCATGTCTGGGTTAGGTGCTAAGTGCTGAAGAAACTTGGTCAGTTCTCTCAACTTTGC TTTGGGCAAGAATCTGGTCACCTGATGGGATCCATGGTACAGGCTACTGCTAAACTTGGCACAGTATCAAGTATA GTACCTCCAAGGACCAGGGCTGGGCAGTCTTTAGTGCTAACATCCCCTTTAGAGTTCACACATCTTGCCCTTCCA TGAATGACCCCTCAGTCTGGCCTCCCCAGCCTCAAGGTCCACTCAGGCACAAGAGCCACAGTACCCTAGATAGTG TCACATGACACCGTTGTCATCCAAGGATAATACAGACCAACTAGGCTACATCTGTGATGAGCAGCTAGCAAAGCC GCTGGTCTTCTCCTAGGACTAAGTCCAGGTGCCTTCCACAATCTCATGGTCTTTCAGGTCCCTGGTTACTTTTCT CAAAGGCCATTTCCAAAAGAATACATGCCTTCACATCACAACCTGTACTGTGAGTCCATTCTAGAGGTCACTGAA AGGCCCTGTAAAGAGAGGACATGGATACGGGACCTGGCCCTGAGGTTATTACTGGCCGTAAGGCAGAGTTAATCC AAGCAAAGCTGGGGAAGCAGAAGTTGGGAGTCTTGTGTTGCTCCCTCTTCCTGTGTGGTGCTCTGGGTTTCTGTG GATCGTGAAGGCGATCTCAAGAGTGTTTCCCTCCAAACCTGATAGCTGCCTATTCCTGTCTGGTTGGGGCTGTGG AGGATGTAGTTGTATTTATTGCATTGTAATATTTTTAACATCCTGTGACTTCATGCTAGAAATTTTCTATTGTTT ATAGAAACTTTTTGTAGAAACATTAACTCTAAAGCACATCTGCATGTCAGTAAAAATCTCAGTTTCGTACAG

PCT/US2003/028547

FIGURE 2055

MAMDQVNALCEQLVKAVTVMMDPNSTQRYRLEALKFCEEFKEKCPICVPCGLRLAEKTQVAIVRHFGLQILEHVV KFRWNGMSRLEKVYLKNSVMELIANGTLNILEEENHIKDALSRIVVEMIKREWPQHWPDMLIELDTLSKQGETQT ELVMFILLRLAEDVVTFQTLPPQRRRDIQQTLTQNMERIFSFLLNTLQENVNKYQQVKTDTSQESKAQANCRVGV AALNTLAGYIDWVSMSHITAENCKLLEILCLLLNEQELQLGAAECLLIAVSRKGKLEDRKPLMVLFGDVAMHYIL SAAQTADGGGLVEKHYVFLKRLCQVLCALGNQLCALLGADSDVETPSNFGKYLESFLAFTTHPSQFLRSSTQMTW GALFRHEILSRDPLLLAIIPKYLRASMTNLVKMGFPSKTDSPSCEYSRFDFDSDEDFNAFFNSSRAQQGEVMRLA CRLDPKTSFQMAGEWLKYQLSTFLDAGSVNSCSAVGTGEGSLCSVFSPSFVQWEAMTLFLESVITQMFRTLNREE IPVNDGIELLQMVLNFDTKDPLILSCVLTNVSALFPFVTYRPEFLPQVFSKLFSSVTFETVEESKAPRTRAVRNV RRHACSSIIKMCRDYPQLVLPNFDMLYNHVKQLLSNELLLTQMEKCALMEALVLISNQFKNYERQKVFLEELMAP VASIWLSQDMHRVLSDVDAFIAYVGTDQKSCDPGLEDPCGLNRARMSFCVYSILGVVKRTCWPTDLEEAKAGGFV VGYTSSGNP1FRNPCTEQ1LKLLDNLLAL1RTHNTLYAPEMLAKMAEPFTKALDMLDAEKSA1LGLPQPLLELND SPVFKTVLERMQRFFSTLYENCFHILGKAGPSMQQDFYTVEDLATQLLSSAFVNLNNIPDYRLRPMLHVFVKPLV LFCPPEHYEALVSPILGPLFTYLHMRLSQKWQVINQRSLLCGEDEAADENPESQEMLEEQLVRMLTREVMDLITV CCVSKKGADHSSAPPADGDDEEMMATEVTPSAMAELTDLGKCLMKHEDVCTALLITAFNSLAWKDTLSCQRTTSQ LCWPLLKQVLSGTLLADAVTWLFTSVLKGLQMHGQHDGCMASLVHLAFQIYEALRPRYLEIRAVMEQIPEIQKDS LDQFDCKLLNPSLQKVADKRRKDQFKRLIAGCIGKPLGEQFRKEVHIKNLPSLFKKTKPMLETEVLDNDGGGLAT IFEP

PCT/US2003/028547

FIGURE 2056

AAAACACCAAATGGCGGATGACGCCGGTGCAGTGGGGGGGCCTGGAGGCCCTGGTGGCCCTGGGATGGGGAACCG
CGGTGGCTTCCGCAGAGGTTTCGCCAGTGGCATCCGGGGCCGGGGTCGCAGCCGTGGACCGGGCCGGGGCTGAGG
CCGCGGAGCTCGCGGAGGCAAGGCCAAAGATAAGGAGTGGATGCCCGTCACCAAGCTGGCCGCCTTGGTCAAGGA
CATGAAGATCAAGTCCCTGGAGGAGATCTATCTCTTCTCCCTGCCATTAAGGAATCAGAGATCATTGACTTTTT
CCTGGGGGCCTCTCTCAAGGATGAGGTTTTGAAGATTATGCCAGTGCAGAAGCAGACCCGTGCTGGCCAGCGCAC
CAGGTTCAAGGCGTTTGTTGCTATCGGGGACTACAGTGGCCACGTCGGTCTGGGTGTTAAGTGCTCCAAGGAGGT
GGCCACCGCCACCCGTGGGGCCATCATCCTGGCCAAGCTCTCCATTGTCCCCGTGCACAGAGGCTACTAGGGGAA
CAAGATCGGCAAGCCCCACACCGTCCCCTGCAAGGTGACAGGCCGCCGTGGCTCTTGTGCTGGTGCGCCTCATCCC
TGCACCCAGGGGCACTGGCATTGTCTCCGCACCTTTGCCCAAGAAGCTCCATGATGACTG
CTACACCTCAGCCCAGGGCTGCACTGCCACCCTGGGCAACTTCGCCAAGGCCACCTTTGATGCCATTTCTAAGAC
CTACAGCTACCTGACCCCGGACCTCTGGAAGGAGACCCAAGCTCCCCTATCAGGAATTCACTGACCA
CCTCGTCAAGACCCACACACAGAGTCTCTGTGCAGCAGACCCAGGCTCCAGCTGTGGCTACAACATAGGGTTTTTA
TACAAGAAAAATAAAGTGAATTAAGCGTG

PCT/US2003/028547

2240/6881 FIGURE 2057

GGGCTGCGCTCTCCAGCTGTGGCTATGGCCCCAGCCCCGAGATGAGGAGGAGAGAACTAGGGGCCCGCAGGCCT GCCAGGGAAAACCGAGACACCATCACCATGACAACCAGTCACCAGCCTCAGGACAGATACAAAGCTGTCTGGCT TATCTTCTTCATGCTGGGTCTGGGAACGCTGCTCCCGTGGAATTTTTTCATGACGGCCACTCAGTATTTCACAAA CCGCCTGGACATGTCCCAGAATGTGTCCTTGGTCACTGCTGAACTGAGCAAGGACGCCCAGGCGTCAGCCGCCC TGCAGCACCCTTGCCTGAGCGGAACTCTCTCAGTGCCATCTTCAACAATGTCATGACCCTATGTGCCATGCTGCC CCTGCTGTTATTCACCTCAACTCCTTCCTGCATCAGAGGATCCCCAGTCCGTACGGATCCTGGGCAGCCT GGTGGCCATCCTGCTGGTGTTTCTGATCACTGCCATCCTGGTGAAGGTGCAGCTGGATGCTCTGCCCTTCTTTGT CCTTCTGCCTGCCAGCTACACGGCCCCCATCATGAGTGGCCAGGGCCTAGCAGGCTTCTTTGCCTCCGTGGCCAT GATCTGCGCTATTGCCAGTGGCTCGGAGCTATCAGAAAGTGCCTTCGGCTACTTTATCACAGCCTGTGCTGTTAT CATTTTGACCATCATCTGTTACCTGGGCCTGCCCCGCCTGGAATTCTACCGCTACTACCAGCAGCTCAAGCTTGA AGGACCCGGGGAGCCAGGAGCCAAGTTGGACCTCATTAGCAAAGGAGGAGCCCAAGAGCAGCCAAAGAGGAATC TGGAGTTTCAGTCTCCAACTCTCAGCCCACCAATGAAAGCCACTCTATCAAAGCCATCCTGAAAAATATCTCAGT CCTGGCTTTCTCTGTCTCATCTTCACCATTGGGATGTTTCCAGCCGTGACTGTTGAGGTCAAGTC CAGCATCGCAGGCAGCACCTGGGAACGTTACTTCATTCCTGTGTCCTGTTTCTTGACTTTCAATATCTTTGA GGCCCGGCTGTTTTGTGCCACTGCTGCTGCTGCTACACATTAAGCCCCGCCGCTACCTGACTGTGGTCTTCGA GCACGATGCCTGGTTCATCTTCATGGCTGCCTTTGCCTTCTCCAACGGCTACCTCGCCAGCCTCTGCATGTG TCTGGCACTGGGGGCTGTTTTCTCCTTCCTGTTCCGGGCAATTGTGTGACAAAGGATGGACAGAAGGACTGCCTG CCTCCCTCCTGTCTGCCCTGCCCCTTCCTTCTGCCAGGGGTGATCTTGAGTGGTCTGGCGGTTTTTTCTTCT ${\tt GTGGGGACATTGTGGGGTTTGGGGCTCAGAGTCGAGGGACGGGGTGTAGCCTCGGCATTTGCTTGAGTTTCTCCAC}$ TCTTGGCTCTGACTGATCCCTGCTTGTGCAGGCCAGTGGAGGCTCTTGGGCTTGGAGAACACGTGTGTCTCTGTG TATGTGTCTGTGTGTCTGCGTCCGTGTCTGTCAGACTGTCTGCCTGTCCTGGGGTGGCTAGGAGCTGGGTCTGAC CGTTGTATGGTTTGACCTGATATACTCCATTCTCCCCTGCGCCTCCTCTGTGTTCTCTCCATGTCCCCCTCC ${\tt CAACTCCCCATGCCCAGTTCTTACCCATCATGCACCCTGTACAGTTGCCACGTTACTGCCTTTTTTAAAAATATA}$

PCT/US2003/028547

2241/6881 FIGURE 2058

CCGGGGACTCGCATTCCCCGGTTCCCCCTCACCCCACGCGGCCTGGACCATGGACGCCAGATGGTGGGCAGTGG TGGTGCTGGCTGCGTTCCCCTCCCTAGGGGCAGGTGGGGAGACTCCCGAAGCCCCTCCGGAGTCATGGACCCAGC TATGGTTCTTCCGATTTGTGGTGAATGCTGCTGGCTATGCCAGCTTTATGGTACCTGGCTACCTCATGGTGCAGT ACTTCAGGCGGAAGAACTACCTGGAGACCGGTAGGGGCCTCTGCTTTCCCCTGGTGAAAGCTTGTGTTTTGGCA ATGAGCCCAAGGCCTCTGATGAGGTTCCCCTGGCGCCCCGAACAGAGGCGGCAGAGACCACCCCGATGTGGCAGG CCCTGAAGCTGCTCTTCTGTGCCACAGGGCTCCAGGTGTCTTATCTGACTTGGGGTGTGCTGCAGGAAAGAGTGA TGACCCGCAGCTATGGGGCCACAGCCACATCACCGGGTGAGCGCTTTACGGACTCGCAGTTCCTGGTGCTAATGA ACCGAGTGCTGGCACTGATTGTGGCTGGCCTCTCTGTGTTCTCTGCAAGCAGCCCCGGCATGGGGCACCCATGT ACCGGTACTCCTTTGCCAGCCTGTCCAATGTGCTTAGCAGCTGGTGCCAATACGAAGCTCTTAAGTTCGTCAGCT TCCCCACCCAGGTGCTGGCCAAGGCCTCTAAGGTGATCCCTGTCATGCTGATGGGAAAGCTTGTGTCTCGGCGCA GCTACGAACACTGGGAGTACCTGACAGCCACCCTCATCTCCATTGGGGTCAGCATGTTTCTGCTATCCAGCGGAC CAGAGCCCCGCAGCTCCCCACCACCTCTCAGGCCTCATCTTACTGGCAGGTTATATTGCTTTTGACAGCT TCACCTCAAACTGGCAGGATGCCCTGTTTGCCTATAAGATGTCATCGGTGCAGATGATGTTTGGGGTCAATTTCT TCTCCTGCCTCTTCACAGTGGGCTCACTGCTAGAACAGGGGGCCCTACTGGAGGGAACCCGCTTCATGGGGCGAC ACAGTGAGTTTGCTGCCCATGCCCTGCTACTCTCCATCTGCTCCGCATGTGGCCAGCTCTTCATCTTTTACACCA TTGGGCAGTTTGGGGCTGCCGTCTTCACCATCATCATGACCCTCCGCCAGGCCTTTGCCATCCTTCTTTCCTGCC TTCTCTATGGCCACACTGTCACTGTGGTGGGAGGGCTGGGGTGGCTGTGGTCTTTGCTGCCCTCCTGCTCAGAG TCTACGCGCGGGGCCGTCTAAAGCAACGGGGAAAGAAGGCTGTGCCTGTTGAGTCTCCTGTGCAGAAGGTTTGAG GGTGGAAAGGGCCTGAGGGGTGAAGTGAAATAGGACCCTCCCACCATCCCCTTCTGCTGTAACCTCTGAGGGAGC TGGCTGAAAGGGCAAAATGCAGGTGTTTTCTCAGTATCACAGACCAGCTCTGCAGCAGGGGATTGGGGAGCCCAG GAGGCAGCCTTCCCTTTTGCCTTAAGTCACCCATCTTCCAGTAAGCAGTTTATTCTGAGCCCCGGGGGTAGACAG CCCTGGTGAGAAAAGCACAAGCGGTGTAGGCTCCAATGCTGCTTTCCCAGGAGGGTGAAGATGGTGCTGTGCTGA GGAAAGGGGATGCAGAGCCCTGCCCAGCACCACCACCTCCTATGCTCCTGGATCCCTAGGCTCTGTTCCATGAGC Α

PCT/US2003/028547

2242/6881 FIGURE 2059

CAGAATCGGTAGACATTGCGAACCAGGTTATGAAGTGCAAGGCTGCAGTTGCTTGGGAGGCTGGAAAGCCTCTCT CCATAGAGGAGATAGAGGTGGCACCCCCAAAGGCTCATGAAGTTCGAATCAAGATCATTGCCACTGCGGTTTGCC ACACCGACGCCTATACCCTGAGGGGAGCTGATCCTGAGGGTTGTTTTCCAGTGATCTTGGGACATGAAGGTGCCG GAATTGAGGAAAGTGTTGGCGAGGGAGTTACTAAGCTGAAGGCGGGTGACACTGTCATCCCACTTTACATCCCAC AGTGTGGAGAATGCAAATTTTGTCTATATCCTAAAACTAACCTTTGCCAGAAGATAAGAGTCACTCAAGGGAAAG GATTAATGCCAGATGGTACCAGCAGATTTACTTGCAAAGGAAAGACAATTTTGCGTTACATGGGAACCAGCACAT TTTCTGAATACACAGTTGTAGCTGATATCTCTGTTGCTAAAATAGATCCTTTAGCACCTTTGGATAAACTCTGCC TTCTAGGTTGTGGCATTTCAGCTGGTGATGGTGCTGCTGTGAACACTGCCAAGGTGGAACCTGGCTCTGTTTGTG CCGTCTTTGGTCTGGGAGGAGTTGGATTGGCAGTTATCAAGGGCTGTAAAGTGGCTGGTGCATCCCGGATCATTG GTGTGGACATCAATAAAGATAAATTTGCAAGGGCCAAAGAGTTTGGAGCCACTGAATGTATTAACCCTCAGGGTT TTAGTAAACCCATCCAGGAAGGGCTCATTGAGACGACTGATGGAGGAGTGGACTATTCCTTTGAATGTATTGGTA ATGTGAAGGTCATGAGAGCAGCACTTGAGGCTTATCACAAGGGCTGGGGAGTCAGCGTGGTGGTGGTAGCTG CTTCAGGTGAAGAAATTGCCACTCGTCCATTCCAGCTGGTAACAGGTCGCACATGGAAAGGAACTGCCTTTGGAG TGACTCACAATCTGTCTTTTGGTGAAATTAACAAAGCCTTTCAACTGATGCATTCTGGAAAGAGCATTCGAACTG TTGTAAAGATTTAATTCAAAAGAGAAAAATAATGTCCAACCTGTCGTGATGTGATGGGAGCAGCTTAACAGGCAG GGAGAAGCGCCTCCAAACTCACAGCCTCGTAGAGCTTCGCAGCTACCCCAGAGAATAGTGTTATGAGTGTAATTC TGCTAGCTTATTAAGGAATATTTTAACATAATAAAAGTAATTTCTACATTTGTGTAGAAATTGTCTTTGTTTTAT AGCCATCAGTGACAAAGTTAATCAGGAGCCAAGTCTGCTTCTGTGATATTATCTTGAAGGGAGGTACTGTGCCTT GTTCGTGCCTGTACCCCAAATTCCTAGTATGGCATCTGCCCCTCAGGGGACACTAAAATGTATTATTGAAACAGC ATATCCAAGTTCTCAGCACCTACTTTTGTCAAATCTTAACATTTTGCCACTTCCACATCACATTGCCATTCCTCC CCTCCAGAGGTAACAATTATCCAAAATTTGATGTTTGTCATTCCTGTGTTGTTGTACTTTCACTGTGTATAACCT AAACCATCTACTCTTTAGTACTGTTTTATATATTTTTTAAGCCTTATACTTGCTCATTCTACAGCTTTTCTTTTTT CGAACTATCTTAATTCATCTGTTCTCCAGTTGAAGGCATGAAGTTGTTGCCAGTTTCTGTATTACAACACTGTAG TGGAACATTCTTCTGCATTGGGCTCACTACATTAGTTACTTAAGATGTGTATCACAGAATAAACACATTTAGCCT TATAGACATTGCCAAATTTATCTTCAAAGTAAATGTGAGTTTTTGTGAATTACGTGAGTGTAGAATGGTGTTTTA TTATGAGTTTAGTTTGCATTTTCCACAA

PCT/US2003/028547

2243/6881 FIGURE 2060

ATCAAGGGTGTTACACTAGGCTTCCATTACAAGATGAGATCTGTGTATGCTCACTTCCCCATCAACGTCGTT
ATCCAGGAGAATGGGTCTCTTGTTGAAATCCGAAATTTCTTGGGTAAAAAATACATCCGCAGGGTTTGGATGAGA
GCAGGTGTTGTTTGTTCAGTATCTCAAGCCCAGAAAGATGAATTAATCCTTGAAGGAAATGACATTGAGCTTGTT
TCAAATTCAGCGGCTTTGATTCAACAAGCCACAACAGTTAAAAAGAAGGATATCAGGGAATTTTTGGATGGTATC
TATGTCTCTGAAAAAAGGAACTGGTCAGCAGGCTGATGAA

WO 2004/030615 PCT/US2003/028547

2244/6881 FIGURE 2061

MIKGVTLGFHYKMRSVYAHFPINVVIQENGSLVEIRNFLGKKYIRRVWMRAGVVCSVSQAQKDELILEGNDIELV SNSAALIQQATTVKKKDIREFLDGIYVSEKGTGQQADE

PCT/US2003/028547

FIGURE 2062

PCT/US2003/028547

FIGURE 2063

 ${\tt MGVHVETISPGDWRTFPKRSQTCVMHYTGMLEDGKKFDSSRDRNKPFKFMLGKQEVIRGWEEGVVQMSVGQRAKL}\\ {\tt TISPDYAYGATGHPGIIPPHATLVFDVELLKLE}$

PCT/US2003/028547

2247/6881 FIGURE 2064

CGCCTTGGCCATTTGCCAGCCACAACCCAGGACCTCCAATGGGGACGCCCACTGAGGATCCTAGTGGTTGCTC TTTTCCTTGTCTCTTTCCTCCCCCAGTCTTTCCTTGTTCTATCATGGGCAATTTCCCGCCTTCCATCCCTCTT TCTTCTGTCTGGCTTGTGTCCTCAGAAACCTCAAACCTCTTCACCTTGCACCCAATCTAAAGGCTAAACGTCTAA TTTTTTTCTGTAACACGTCCTGGCCCCAGTATAAATTAGAAAATGGCGCTCAGTGGCCCAGAAAACAGCACTTCCA ATTTCTCTATTTTGTGGGACTTAGACAACTTCTATGGAAAAATGGGCAAATGGGTCTGAGGTACCCTACTTCCAG TGTCTACCCCTCCTTCTTCCACTGGCGATGCTGACTCCTCTTTGTCTGTTGACCCCCTCCGATCTTTCTCCCCCAC CACCTATCCGAACCTGCTTCTAATTCTCCCCCAGAACCTATTTCTACCCACAATCCACCCTCTTATGCCCCTCCC ATTACCACCCTTCCTCACATCCTCTATGGCTTACAGTTTGGGCCTGCGACCAACCCCCAGGCCCCTGCCTAGCAA TTTCCCCTCGGAGAGGTGGCAGGAACCAAAGGAATAGTTCGGGTTCAGGTCCCTTTCTCCCTGTTCGACCTTTCC CAAATTAGTGAACATCTAGGCTCTTTCCCATCTGACCCCACCAAATATATACGAGAATTCCAATACTTAACCCAG TCCTATAATCTTACTTGGAATGACTTAAATGTCATCCTTACCTCTACCTCGCTCCTGAGGAGTGAGAGTGGGTT TGGATCCTAGCTCAATCTTAGGCTGATAACCGCCGGTGCCGTAAGCCTGGCCTCCAGTAAGGTGCTAGGGCAGTA CCCTGTGAAGACCCCGGATGGACTTACCAGGCCCTGGGACCCATGCATAGCCAGGCGGGACTACATGATCTCTTG AAAAAACCACTCAGAACAAAGATAAAAATCCAGCTCAGTTTATGGCCTGTCTACCTGCCACCCTCAGGCGATATA GTAGAAAGAAACTTCAAAAATTAGAGTCTGGCTCTCAGATCCCACAACAGGAATTAATCAACCTCGCCTTCAAGG TGTTCAATAATAGGGAAGAGACTGCCCGGCGACAGCGCATTTCAGAACTACAGATGCTTGCCTCCGCCATAAGAC AAACCCCAGCTGCACTGCCTACCTGCAAGAACTTCAAGGCATCTAAACGCAACATCCAACAGCCCCTCTGGGACT TTGCTTCAAGCGATGAAAACCTGGCCACTGGGCAAGGAATGCCTGCAGCCTGGGATTCCTCCTAAGCCATGCCCC GCCTGTGCGTCCCTCACTGGAAGTCTGACTGCCCGACTCTCATCGCCACTTCCGGAGCTCCTGGAGCTCAAACCC AAAGCTCCCCACCGACTCCTTCCCAGATCTCCTCGGCTTGGCGGCTGAAGACTGACGCTGCCCGAACGTCTCGGA GGCCCCTTAGACAATCGCGGATGCCGAGCTTCGGGTAACTCTTAGGGTGGAGGCATAAAAAGACAGGAATGTAAG GTCCTCTGAGCAGGCGGCGCCATGGTCAAGCCATCGTGACCCCTGTGACTCACACGTACACATCCAGAAGGTCTC CTGGAGCCAGAAAGTCTGGGACGACAGGAAAACCACAAAAGAAGAAAAA

PCT/US2003/028547

2248/6881 FIGURE 2065

GGGCCTGGACGCTTTGGCAACCGCTACTCCCGGGGGTGCTTTTTCTGCAGGGACGAAGTGCCACCTATGCTAGTG GCGGGTCTGGAAGCCTAGAGGGGAACCAGGCTGCAGAGCCGGGCCAAGGGATTAGCGGCGGCGGCGGCATGGC CCCGGGTGAGCAGGGTCCTCCGGGCCTCCGGGCCCCCTGGAGTTCCAGGCATCGATGGCATCGACGGTGACCG AGGTCCTAAGGGCCCCCGGGCCCCCGGGTCCTGCAGGTGAACCGGGAAAGCCAGGAGCTCCAGGCAAGCCTGG CACACCTGGCGCTGATGGATTAACAGGACCTGATGGATCCCCTGGCTCCATTGGGTCAAAGGGACAAAAAGGAGA ACCTGGTGTGCCTGGATCGCGTGGATTTCCAGGCCGTGGTATTCCTGGACCCCCTGGTCCTCCTGGGACAGCAGG ACTCCCTGGAGAGCTTGGCCGTGTAGGACCTGTTGGTGACCCTGGGAGAAGAGACCACCTGGCCCCCCTGGCCC $\verb|CCCAGGACCCAGAGGAACAATTGGCTTTCATGATGGAGATCCATTGTGTCCCAATGCCTGTCCACCAGGTCGCTC|\\$ AGGATATCCAGGCCTACCAGGCATGAGGGGTCATAAAGGGGCTAAAGGAGAAATTGGTGAACCAGGAAGACAAGG ACACAAGGGTGAAGAAGGTGACCAGGGAGAACTCGGAGAAGTTGGAGCTCAAGGACCTCCAGGAGCCCAGGGTTT GCGAGGCATCACCGGCATAGTTGGGGACAAAGGGGAAAAAGGTGCTCGGGGCTTAGATGGTGAACCTGGGCCTCA GGGTCTTCCTGGTGCACCTGGTGATCAAGGACAGCGAGGACCTCCAGGAGAAGCAGGTCCCAAAGGAGATAGAGG GGCTGAAGGTGCTAGAGGAATTCCTGGTCTCCCTGGGCCCAAAGGAGACACGGGTTTGCCAGGTGTGGATGGCCG TGATGGGATCCCTGGAATGCCTGGAACAAAGGGTGAACCAGGAAAACCTGGGCCTCCTGGTGATGCAGGATTGCA GGGGTTACCAGGTGTACCTGGAATTCCTGGTGCAAAGGGTGTTGCTGGTGAAAAGGGTAGCACAGGTGCTCCAGG GAAGCCTGGTCAGATGGGAAATTCAGGCAAACCGGGCCAACAGGGGCCTCCAGGAGAGGTGGGACCCCGAGGACC CCAGGGGCTTCCTGGCAGTAGAGGAGAATTAGGACCAGTGGGATCCCCAGGCCTACCAGGTAAACTGGGTTCTCT GGGTAGCCCTGGCCTCCCTGGCCTGGCCCCCTGGACTCCTGGAATGAAAGGTGACAGGGGTGTAGTCGG TGAACCGGGTCCAAAGGGTGAACAGGGTGCCTCTGGTGAAGAAGGTGAAGCAGGAGAAAGGGGGGAACTTGGAGA TATAGGATTACCTGGCCCAAAGGGATCTGCAGGTAATCCTGGGGAACCTGGCTTGAGAGGGCCTGAGGGAAGTCG GGGGCTTCCTGGAGTGGAAGGACCAAGAGGACCACCTGGACCCCGGGGTGTGCAGGGAGAACAGGGTGCCACCGG CCTGCCTGGTGTCCAGGGCCCTCCGGGTAGAGCACCGACAGATCAGCACATTAAGCAGGTTTGCATGAGAGTCAT ACAAGAACATTTTGCTGAGATGGCTGCCAGTCTTAAGCGTCCAGACTCAGGTGCCACTGGGCTTCCTGGAAGGCC TGGCCCTCCTGGTCCCCCGGCCCTCCTGGAGAGAATGGTTTCCCAGGCCAGATGGGAATTCGTGGCCTTCCGGG CATTAAGGGGCCCCTGGTGCTCTTGGTTTGAGGGGACCTAAAGGTGACTTGGGAGAAAAGGGGGAGCGTGGCCC TCCAGGAAGAGGTCCCAACGGTTTGCCTGGAGCTATAGGTCTCCCAGGTGACCCAGGCCCTGCCAGCTATGGCAG AAATGGCCGAGACGGTGAGCGAGGCCCCCCAGGGGTGGCAGGAATTCCTGGAGTGCCTGGACCCCCGGGACCTCC TGGGCTTCCCGGTTTCTGTGAGCCAGCCTCCTGCACCATGCAGGCTGGTCAGCGAGCATTTAACAAAGGGCCTGA CCCTTGAAAGGCTTACTGCTGCATGGCTGTCTGCATGAACCACGCCTGGTGAAGGAGCCTGGGTGAGAAACACCA TCCAAAGCTGGGGCAAAGATGATTACCTTCAGCATGATTACAATGTATTACCTTCAGTATGATTACAGAAGTCCT ACTTGACAATCACATATAGAAGAACGGTGCTATTCAGTAAGTTCTCTTTCCTTTCCCTTGGAGGGAAGACAGCAG TGAGCTTTAGTGTGCTATACCTATGTGTCTTATCGTGGGCCACTGTGCCAATAAACAAAAAAACTGTTTGGTTT ACCTC

WO 2004/030615 PCT/US2003/028547

2249/6881 FIGURE 2066

GGCCGCCCCTGCAGATTGTCTCTTGTTGCGTAAGTTTTTTTGACCGTCACTCGTGTCAGCTTCAAAGTCAGATA GATTTTTCTCCCAGCATGTTCTACTTCCGAGGCTGTGGCCGTTGGGTCGCGGTTTCCTTCACCAAGCAGCAATTT CCGTTGGCACGGTTGAGCAGTGACAGCGCGCGCCCCGGACTCCGCACTTCGACGTGATAGTCATTGGTGGAGGA ACGATCGGTCAGATGTCATGTAATCCTTCCTTTGGTGGCATCGGAAAGGGACATTTAATGAGGGAAGTAGATGCC TTGGATGGCCTGTGTTCTCGCATCTGTGACCAGTCTGGTGTACATTATAAAGTATTAAACCGGCGTAAGGGACCA CCACTGCTTACTGTTCAGGAGGGAGCTGTAGAAGATCTTATTCTTACAGAACCAGAGCCTGAACACACTGGGAAA TGCCGTGTCAGTGGGGTTGTTTTGGTGGATGGAAGCACAGTATATGCAGAGAGTGTGATTCTGACTACTGGGACA TTTCTGAGAGGCATGATTGTAATTGGATTGGAGACGCATCCAGCAGGACGTTTAGGGGATCAGCCTTCTATAGGA $\verb|TTGGCTCAGACACTGGAGAAGTTAGGGTTTGTGGTGGGAAGGTTGAAGACTGGGACTCCACCCCGAATTGCCAAA|$ ACAGTATGGATTAAGCCAGAAGATCAGCTGCCATGTTACTTGACTCACACCCAACCCTAGAGTGGATGAGATTGTC CTTAAGAACCTTCACCTTAATAGTCATGTTAAAGAAACGACAAGAGAGCCTCGATACTGTCCCTCCATTGAATCA CCACAGGGGTTATCTATGACGCTACCAGCTGAGTTACAAGAGAAAATGATCACATGCATCAGAGGCTTGGAGAAA GCTAAAGTGATTCAGCCAGACGGAGTTTTGCTCTTGTTGCCCAGGATGGAGTGCAATGGTGCGATCTCGGCTCAC ACTCATTTGGTTCAACGACTCTTCTTTGCTGGACAGATCAATGGCACCACTGGTTATGAGGAAGCTGCAGCTCAA GGTGTGATAGCCGGAATCAACGCCAGTCTTCGGGTCAGTCGCAAGCCTCCCTTTGTGGTTAGCCGAACAGAAGGT TACATAGGAGTCTTGATTGATGACCTCACTACTCTGGGCACCAGTGAACCATACCGCATGTTTACCAGCCGAGTA GTGTCCCAACAACGATATGAAAGAGCTTGTTGGATGAAGTCTTCTTTAGAAGAAGGCATTTCTGTTGAAATCT ATTGAGTTTTTGAGCTCTAAATGGAAAAAATTAATCCCAGAGGCTTCTATAAGTACTAGTAGAAGTCTGCCTGTC AGAGCTCTCGATGTTCTGAAGTATGAGGAAGTTGACATGGATTCATTAGCCAAGGCTGTTCCAGAGCCCTTGAAG AAGTATACTAAATGTAGAGAGCTGGCTGAAAGACTGAAAATAGAAGCCACTTATGAATCAGTGTTGTTCCATCAA CTACAAGAAATAAAGGGAGTTCAGCAAGATGAAGCTCTCCAACTGCCAAAAGACCTAGATTATTTGACTATCAGG GATGTGTCTTTGTCCCATGAAGTTCGAGAGAAACTACATTTTAGTCGTCCACAGACGATCGGGGCTGCTAGTCGC ATACCCGGAGTAACACCTGCCGCCATCATCAATCTGCTGAGATTTGTGAAGACCACTCAACGAAGACAGTCGGCT ATTCATAAAAGATTTTTAAAGAGCATATAAATAATTTGATCAATACAACAGTATAGATAAAAGAATTATTTAGCA CATGTTAAAATAGCTTATTAGGTTACTATGGGTTTGCCATTAATTTCTGAGTGGGACAGAAATTATAATTGTGC TGTGCAGTGTTCATCAAAGAGAGAGACAGTGAACCTAAAACTGAACCTGGAATAAAACTCAACATGCAGATTTGC CTACTCATAGGGACTTTGCCTATTAAGTCTACCAAATTAAAAGTCTTATCATTCAGCGTGTTTTGAGAGTTAATA ATCTTTTGCTTGGTTATACTAGGCTAGGAAGCAATATCAAAGCCCTTAAATTCTCAAGACTAAAGACTTGAGATT ATATAAAATTATCCAGAATCATTCAGCTAATACTATTGGAATATAGTATGTAGGGTGAAAGTTGACAGAAATCTG TACTTCTTCAGGAAATCCTCACTGGTAATTGTTTTGAACATTAATGAAAGCCCTATAAAATAGAAAGATTGGAAA TCACCATTGTTTCCTATTATCCACAGTGTGGATGGATACTTATTTGGTGACCTAGTTATGGGAGAATTGAGTAAC GTTAGTTATTTTATATCATACCATAAAAATATTTTC

PCT/US2003/028547

FIGURE 2067

MFYFRGCGRWVAVSFTKQQFPLARLSSDSAAPRTPHFDVIVIGGGHAGTEAATAAARCGSRTLLLTHRVDTIGQM SCNPSFGGIGKGHLMREVDALDGLCSRICDQSGVHYKVLNRRKGPAVWGLRAQIDRKLYKQNMQKEILNTPLLTV QEGAVEDLILTEPEPEHTGKCRVSGVVLVDGSTVYAESVILTTGTFLRGMIVIGLETHPAGRLGDQPSIGLAQTL EKLGFVVGRLKTGTPPRIAKESINFSILNKHIPDNPSIPFSFTNETVWIKPEDQLPCYLTHTNPRVDEIVLKNLH LNSHVKETTRGPRYCPSIESKVLRFPNRLHQVWLEPEGMDSDLIYPQGLSMTLPAELQEKMITCIRGLEKAKVIQ PDGVLLLPRMECNGAISAHHNLPLPGYGVQYDYLDPRQITPSLETHLVQRLFFAGQINGTTGYEEAAAQGVIAG INASLRVSRKPPFVVSRTEGYIGVLIDDLTTLGTSEPYRMFTSRVEFRLSLRPDNADSRLTLRGYKDAGCVSQQR YERACWMKSSLEEGISVLKSIEFLSSKWKKLIPEASISTSRSLPVRALDVLKYEEVDMDSLAKAVPEPLKKYTKC RELAERLKIEATYESVLFHQLQEIKGVQQDEALQLPKDLDYLTIRDVSLSHEVREKLHFSRPQTIGAASRIPGVT PAAIINLLRFVKTTORRQSAMNESSKTDQYLCDADRLQEREL

WO 2004/030615 PCT/US2003/028547

2251/6881 FIGURE 2068

 $\tt CTCATTTAACTTTTTAATGGGTCTCAAAATTCTGTGACAAATTTTTGGTCAAGTTGTTTCCATTAAAAAGTACT$ GATTTTAAAAACTAATAACTTAAAACTGCCACACGCAAAAAAGAAAACCAAAGTGGTCCACAAAACATTCTCCTT TCCTTCTGAAGGTTTTACGATGCATTGTTATCATTAACCAGTCTTTTACTACTAAACTTAAATGGCCAATTGAAA CAAACAGTTCTGAGACCGTTCTTCCACCACTGATTAAGAGTGGGGTGGCAGGTATTAGGGATAATATTCATTTAG CCACCGCAACTGTCTGTCTCATATCACGAACAGCAAAGCGACCCAAAGGTGGATAGTCTGAGAAGCTCTCAACAC ACATGGGCTTGCCAGGAACCATATCAACAATGGCAGCATCACCAGACTTCAAGAATTTAGGGCCATCTTCCAGCT ATACAGGGGCATAGCCGGCGCTTATTTGGCCTGGATGGTTCAGGATAATCACCTGAGCAGTGAAGCCAGCTGCTT TGAAGCCCACATTGTCCCCAGGAAGAGCTTCACTCAAAGCTTCATGGTGCATTTCGACAGATTTTACTTCCGTTG TAACGTTGACTGGAGCAAAGGTGACCACCATACCGGGTTTGAGAACACCAGTCTCCACTCGGCCAACAGGAACAG GGATGCAGTCCAGAGCCTCAAGCAGCGTGGTTCCACTGGCATTGCCATCCTTACGGGTGACTTTCCATCCCTTGA ACCAAGGCATGTTAGCACTTGGCTCCAGCATGTTGTCACCATTCCAACCAGAAATTGGCACAAATGCTACTGTGT CGGGGTTGTAGCCAATTTTCTTAATGTAAGTGCTGACTTCCTTAACAATTTCCTCATATCTCTTCTGGCTGTAGG GTGGCTCAGTGGAATCCATTTTGTTAACACCGACAATTAGTTGTTTCACACCCAGTGTGTAAGCCAGAAGGGCAT GCTCTCGGGTCTGCCCATTCTTGGAGATACCAGCTTCAAATTCACCAACACCAGCAGCAACAATCAGGACAGCAC AGTCAACCTGAGATGTCCCTGTAATCATGTTTTTGATAAAGTCTCTGTGTCCTGGGGCATCAATGATAGTCACAT AGTACTTGCTGGTCTCAAATTTCCACAAGGAGATATCAATGGTGATACCACGTTCACGCTCAGCTTTCAGTTTAT CCAAGACCCAGGCATACTTGAAGGAGCCCTTTCCCATCTCAGCAGCCTCCTTCTCAAATTTTTCAATGGTTCTTT TGTCGATGCCACCGCATTTATAGATCAGATGGCCAGTAGTGGTGGACTTGCCCGAATCTACGTGTCCAATGACGA CAATGTTGATATGAGTCTTTTCCTTTCCCATTTTGGCTTTTAGGGGTAGTTTTCACGACACCTGTGTTCTGGCGG CAAACCCG

PCT/US2003/028547

2252/6881 FIGURE 2069

ACGGGTTTGCCGCCAGAACACAGGTGTCGTGAAAACTACCCCTAAAAGCCAAAATGGGAAAGGAAAAGACTCATA TCAACATTGTCGTCATTGGACACGTAGATTCGGGCAAGTCCACCACTACTGGCCATCTGATCTATAAATGCGGTG GCATCGACAAAAGAACCATTGAAAAATTTGAGAAGGAGGCTGCTGAGATGGGAAAGGGCTCCTTCAAGTATGCCT GGGTCTTGGATAAACTGAAAGCTGAGCGTGAACGTGGTATCACCATTGATATCTCCTTGTGGAAATTTGAGACCA GCAAGTACTATGTGACTATCATTGATGCCCCAGGACACAGAGACTTTATCAAAAACATGATTACAGGGACATCTC AGGCTGACTGTGCTGTTGTTGCTGCTGGTGTTGGTGAATTTGAAGCTGGTATCTCCAAGAATGGGCAGA CCCGAGAGCATGCCCTTCTGGCTTACACACTGGGTGTGAAACAACTAATTGTCGGTGTTAACAAAATGGATTCCA CTGAGCCACCCTACAGCCAGAAGAGATATGAGGAAATTGTTAAGGAAGTCAGCACTTACATTAAGAAAATTGGCT ACAACCCCGACACAGTAGCATTTGTGCCAATTTCTGGTTGGAATGGTGACAACATGCTGGAGCCAAGTGCTAACA TGCCTTGGTTCAAGGGATGGAAAGTCACCCGTAAGGATGGCAATGCCAGTGGAACCACGCTGCTTGAGGCTCTGG GTATTGGTACTGTTCCTGTTGGCCGAGTGGAGACTGGTGTTCTCAAACCCGGTATGGTGGTCACCTTTGCTCCAG TCAACGTTACAACGGAAGTAAAATCTGTCGAAATGCACCATGAAGCTTTGAGTGAAGCTCTTCCTGGGGACAATG TGGGCTTCAATGTCAAGAATGTCTCTGTCAAGGATGTTCGTCGTGGCAACGTTGCTGGTGACAGCAAAAATGACC CACCAATGGAAGCAGCTGGCTCACTGCTCAGGTGATTATCCTGAACCATCCAGGCCAAATAAGCGCCGGCTATG CCCCTGTATTGGATTGCCACACGGCTCACATTGCATGCAAGTTTGCTGAGCTGAAGGAAAAGATTGATCGCCGTT CTGGTAAAAAGCTGGAAGATGGCCCTAAATTCTTGAAGTCTGGTGATGCTGCCATTGTTGATATGGTTCCTGGCA TTGCGGTGGGTGTCATCAAAGCAGTGGACAAGAAGGCTGCTGGAGCTGGCAAGGTCACCAAGTCTGCCCAGAAAG CTCAGAAGGCTAAATGAATATTATCCCTAATACCTGCCACCCCACTCTTAATCAGTGGTGGAAGAACGGTCTCAG AACTGT

PCT/US2003/028547

2253/6881 FIGURE 2070

CCGGCTCGCGCCCTCCGGGCCTCCCGAGCCTTCGGAGCGGCGCCGTCCCAGCCCAGCTCCGGGGAAACG CGAGCCGCG<u>ATG</u>CCTGGGGGGTGCTCCCGGGGGCCCCGCCGGGGACGGGCGTCTGCGGCTGGCGCGACTAGCG CTGGTACTCCTGGGCTGGGTCTCCTCGTCTTCTCCCACCTCCTCGGCATCCTCCTTCTCCTCCTCGGCGCCCGTTC CTGGCTTCCGCCGTGTCCGCCCAGCCCCGCTGCCGGACCAGTGCCCCGCGCTGTGCGAGTGCTCCGAGGCAGCG CGCACAGTCAAGTGCGTTAACCGCAATCTGACCGAGGTGCCCACGGACCTGCCCGCCTACGTGCGCAACCTCTTC CTCAACCTCAGCGGCAGCCGCCTGGACGAGGTGCGCGCGGGCGCCTTCGAGCATCTGCCCAGCCTGCGCCAGCTC GACCTCAGCCACAACCCACTGGCCGACCTCAGTCCCTTCGCTTTCTCGGGCAGCAATGCCAGCGTCTCGGCCCCC AGTCCCCTTGTGGAACTGATCCTGAACCACATCGTGCCCCCTGAAGATGAGCGGCAGAACCGGAGCTTCGAGGGC ATGGTGGTGGCGGCCCTGCTGGCGGGCCGTGCACTGCAGGGGCTCCGCCGCTTGGAGCTGGCCAGCAACCACTTC AGCCTGACCTACGTGTCCTTCCGCAACCTGACACATCTAGAAAGCCTCCACCTGGAGGACAATGCCCTCAAGGTC $\tt CTTCACAATGGCACCCTGGCTGAGTTGCAAGGTCTACCCCACATTAGGGTTTTCCTGGACAACAATCCCTGGGTC$ TGCGACTGCCACATGGCAGACATGGTGACCTGGCTCAAGGAAACAGAGGTAGTGCAGGGCAAAGACCGGCTCACC TGTGCATATCCGGAAAAAATGAGGAATCGGGTCCTCTTGGAACTCAACAGTGCTGACCTGGACTGTGACCCGATT CTTCCCCCATCCCTGCAAACCTCTTATGTCTTCCTGGGTATTGTTTTAGCCCTGATAGGCGCTATTTTCCTCCTG GTTTTGTATTTGAACCGCAAGGGGATAAAAAAGTGGATGCATAACATCAGAGATGCCTGCAGGGATCACATGGAA ${\tt GGGTATCATTACAGATATGAAATCAATGCGGACCCCAGATTAACAAACCTCAGTTCTAACTCGGATGTC} {\color{red}{\textbf{TGA}}}{\tt GAA}$ ATATTAGAGGACAGACCAAGGACAACTCTGCATGAGATGTAGACTTAAGCTTTATCCCTACTAGGCTTGCTCCAC TTTCATCCTCCACTATAGATACAACGGACTTTGACTAAAAGCAGTGAAGGGGATTTGCTTCCTTGTTATGTAAAG TTTCTCGGTGTGTTCTGTTAATGTAAGACGATGAACAGTTGTGTATAGTGTTTTACCCTCTTCTTTTTCTTGGAA TACAGTTCAAGGTGTAGCAAGTGTACCCACACAGATAGCATTCAACAAAAGCTGCCTCAACTTTTTCGAGAAAAA TACTTTATTCATAAATATCAGTTTTATTCTCATGTACCTAAGTTGTGGAGAAAATAATTGCATCCTATAAACTGC CTGCAGACGTTAGCAGGCTCTTCAAAATAACTCCATGGTGCACAGGAGCACCTGCATCCAAGAGCATGCTTACAT TTTACTGTTCTGCATATTACAAAAATAACTTGCAACTTCATAACTTCTTTGACAAAGTAAATTACTTTTTTGAT TGCAGTTTATATGAAAATGTACTGATTTTTTTTAATAAACTGCATCGAGATCCAACCGACTGAATTGTTAAAAA AAAAAAAAATAAAGATTCTTAAAAGAA

PCT/US2003/028547

FIGURE 2071

MPGGCSRGPAAGDGRLRLARLALVLLGWVSSSSPTSSASSFSSSAPFLASAVSAQPPLPDQCPALCECSEAARTV KCVNRNLTEVPTDLPAYVRNLFLTGNQLAVLPAGAFARRPPLAELAALNLSGSRLDEVRAGAFEHLPSLRQLDLS HNPLADLSPFAFSGSNASVSAPSPLVELILNHIVPPEDERQNRSFEGMVVAALLAGRALQGLRRLELASNHFLYL PRDVLAQLPSLRHLDLSNNSLVSLTYVSFRNLTHLESLHLEDNALKVLHNGTLAELQGLPHIRVFLDNNPWVCDC HMADMVTWLKETEVVQGKDRLTCAYPEKMRNRVLLELNSADLDCDPILPPSLQTSYVFLGIVLALIGAIFLLVLY LNRKGIKKWMHNIRDACRDHMEGYHYRYEINADPRLTNLSSNSDV

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PCT/US2003/028547

FIGURE 2072

CCTGGAGGCCGGCTTGGCGGCCAGGCGCAAGTTCGCGACGTCACCCGATCCGACCCTGGTACCCGGAGCGGCCCT
GGCGCGGCTGTCGGCTGCACCAGCTCCCTGCAGGAAGAGTGGAGAGGTTGTTCCCGGCGGGAGCGGGTACCGG
CCGCATCCCGGCCGGACCAGGGAGCCTGGGCGCCGCAGTTCGGCTGCTGTTTTAATGTGTCTT
CTCCCCAAGCAATGGAAACAGAGTTGCTGCTTCAGTGGTAGTAGTACTTGCAATTCAAGTAACACTAACTTAAAA
TCTACTTTAGACACAGTGGGCGATAGTATGAAAGAACCAAGAAGGATTTCGGCTGTCCTGGAGCTGATAATGCTG
CAAACAAGCCATGATGAGATGTTCTCCCACATTTACAAAATCCGGGAGACTGCGGATGGCTGTCCTGGAGGTG
GAGGGGAAATTGGTAAGTAGGACAGAGGGTAACATTGATGACTTGCTCATTGGTGGAAATGCCTCCGCTGAAGGC
ACTGAAAGCGAAGGCAAACTTGAAGAACAGAGACCAGAAAGAGTAAAACCTTTTATGACAGGGGCTGCAGAACAA
ATCAAACACATCCTTGCTAATTTCAAAAGCTACCACTTCTTTATTGGTGAAAACATGAATCCAGATGGCATGGTT
GCTCCACAGGACTACCAAATAGAAGTTCAAGCTTCGGATGACACTGAAAGGTGTTCAGGAGATTTTGGTTCCACT
AGAAATAATGAAAATTTATGCCAAGAATAG

PCT/US2003/028547

2256/6881 FIGURE 2073

 ${\tt MCVFGLLPKQWKQSCCFSGSSTCNSSNTNLKSTLDTVGDSMKEPRRISAVLELIMLQTSHDEMFSHIYKIRETADGLCLEVEGKLVSRTEGNIDDLLIGGNASAEGTESEGKLEEQRPERVKPFMTGAAEQIKHILANFKSYHFFIGENMNPDGMVAPQDYQIEVQASDDTERCSGDFGSTRNNENLCQE$

WO 2004/030615 PCT/US2003/028547

2257/6881 FIGURE 2074

GTGCGAGCCAGAAGGGGAAAGGCGGCCACTCGTGCCTGAGCGACCGCAGAGGGGAGTGGGAGCAGTGGGGTAAAG GAGCGGGGGCGGGAATAAGAAAGGCCGAGAGAAGGCGGACAGAGGCTAGTGGTGGTGGTGGTAGGGGGGAGA GAAGGGAAGGGGGGGTCACGCGGGGGCGCGCGCGCGCGCACCGGGAGCGCCTCGGAGGCGAGTGGAACTGGATCGG GTTTGCTGCCAGCGCGTGAGCTTCGGCCGCCATTTTACAACAGCTCCACTCGCGCCGGACACAGGGAGCAGCGA GCACGCGTTTCCCGCAACCCGATACCATCGGACAGGATTTCTCCGCCTCAGCCCAACGGGGAGATCTCTGGAAAC ATGGCTACAGAACATGTTAATGGAAATGGTACTGAAGAGCCCATGGATACTACTTCTGCAGTTATCCATTCAGAA AATTTTCAGACATTGCTTGATGCTGGTTTACCACAGAAAGTTGCTGAAAAACTAGATGAAATTTACGTTGCAGGG CTAGTTGCACATAGTGATTTAGATGAAAGAGCTATTGAAGCTTTAAAAGAATTCAATGAAGACGGTGCATTGGCA GTTCTTCAACAGTTTAAAGACAGTGATCTCTCTCATGTTCAGAACAAAAGTGCCTTTTTATGTGGAGTCATGAAG ACTTACAGGCAGAGAAAAACAAGGGACCAAAGTAGCAGATTCTAGTAAAGGACCAGATGAGGCAAAAATTAAG GCACTCTTGGAAAGAACAGGCTACACACTTGATGTGACCACTGGACAGAGGAAGTATGGAGGACCACCTCCAGAT TCCGTTTATTCAGGTCAGCAGCCTTCTGTTGGCACTGAGATATTTGTGGGAAAGATCCCAAGAGATCTATTTGAG CTCAATAGAGGTTATGCGTTTGTCACTTTTTGTACAAAAGAAGCAGCTCAGGAGGCTGTTAAACTGTATAATAAT CATGAAATTCGTTCTGGAAAACATATTGGTGTCTCGCATCTCAGTTGCCAACAATAGGCTTTTTGTGGGCTCTATT CCTAAGAGTAAAACCAAGGAACAGATTCTTGAAGAATTTAGCAAAGTAACAGAGGGTCTTACAGACGTCATTTTA TACCACCAACCGGATGACAAGAAAAAAAACAGAGGCTTTTGCTTTCTTGAATATGAAGATCACAAAACAGCTGCC CAGGCAAGGCGTAGGTTAATGAGTGGTAAAGTCAAGGTCTGGGGGGAATGTTGGAACTGTTGAATGGGCTGATCCT ATAGAAGATCCTGATCCTGAGGTTATGGCAAAGGTAAAAGTGCTGTTTGTACGCAACCTTGCCAATACTGTAACA GAAGAGATTTTAGAAAAGGCATTTAGTCAGTTTGGGAAACTGGAACGAGTGAAGAAGTTAAAAGATTATGCGTTC CAAATGTATGACGATTACTACTATTATGGTCCACCTCATATGCCCCCTCCAACAAGAGGTCGAGGGCGTGGAGGT AGAGGTGGTTATGGATATCCTCCAGATTATTATGGATATGAAGATTATTATGATTATTATGGTTATGATTACCAT AACTATCGTGGTGGATATGAAGATCCATACTATGGTTATGAAGATTTTCAAGTTGGAGCTAGAGGAAGGGGTGGT AGAGGAGCAAGGGGTGCTCCATCCAGAGGTCGTGGGGCTGCTCCTCCCCGCGGTAGAGCCGGTTATTCACAG AGAGGAGGTCCTGGATCAGCAAGAGGCGTTCGAGGTGCGAGAGGGGGTGCCCAACAACAAGAGGCCGCGGGGTA AAGCGGCGCCAGACCAATAATCAGAACTGGGGCTCCCAACCCATTGCTCAGCAACCGCTCCAAGGTGGTGATCAT TCTGGTAACTATGGTTACAAATCTGAAAACCAGGAGTTTTATCAGGATACTTTTGGGCAACAGTGGAAGTAGAAA CAGTAGGCCTCTGTAAAATTGGAGACTGATAGGTTGATCAGAAACTCACCCTAAATCTGAACGGTGCCGCTAT AATTTGTGACATCTGGCAAGATTTCCCTTTATGTATATTTTTAACAATCCGCTTGGACACGAACAAAGCCACAC AGTTAATGAGTTTGCATTTGTGCTTGAGAAAATTTGGCTCAAGTCCATTTGGCTGTAGTGTCAACGATGTTTCCA GTAGTGTTTAGATTTGGTGTCTTCAAAGGTAGTTGATTAAAACCAAGTGTGTCTTTAATATCTTGTATCAGAATA ACTTTGTATGTTACCAACTTAAATTGCTAGAATAAGGTAAATTGATACACAACTGCTATTTTTAATTTAGAACTT TGACCTAATTTGGGTTTTCAAAACCATTTTGGCTACTTGTATTCTTTATGCTGTTGTTTATTTCAATAAAAATT CACACCT

PCT/US2003/028547

2258/6881 FIGURE 2075

ATCGCGTGCGGCTTTCGCCGCGCTATTGCTTGCCAGCTTTCCAGAGTGTTGAATCTTCCACCAGAAAACTTGATC ACATCAATATCTGCAGTTCCAATTTCCCAAAAAGAAGAAGTAGCTGATTTTCAGCTTTCTGTGGATTCTTTATTG GAAAAAGACAATGACCATTCAAGA,CCAGATATTCAAGTTCAAGCCAAGAGACTAGCAGAGAAGCTAAGATGTGAT ACAGTGGTGAGTGAAATCAGTACTGGTCAAAGGACTGTAAATTTCAAAATAAACAGAGAGCTCTTAACAAAGACA GTGCTACAACAAGTAATTGAAGATGGCTCAAAATATGGATTAAAAAGTGAACTTTTCTCTGGACTTCCCCAGAAG AAGATTGTGGTTGAATTCAGTTCACCTAATGTTGCCAAAAAATTTCATGTTGGACATTTGCGTTCTACCATCATA GGAAATTTTATAGCAAATCTCAAAGAAGCTTTAGGACATCAAGTAATAAGAATAAATTACCTTGGCGATTGGGGC ATGCAGTTTGGTCTTCTGGGAACTGGCTTCCAGCTGTTTGGCTATGAGGAAAAACTGCAGTCCAATCCTCTACAG CATCTCTTTGAAGTTATGTACAAGTTAATAAAGAAGCAGCAGATGATAAAAGTGTAGCAAAAGCAGCACAGGAG TTCTTCCAACGATTGGAACTGGGCGATGTGCAAGCACTTTCACTGTGGCAAAAATTTCGGGACTTGAGCATTGAA GAGTACATTCGGGTTTACAAGCGTCTGGGAGTATATTTTGATGAATATTCAGGAGAATCATTTTATCGTGAAAAA TCTCAAGAGGTCTTAAAGTTGCTGGAGAGTAAAGGACTCCTACTGAGAACAATAAAAGGAACGGCTGTAGTAGAT CTCTCTGGGAATGGCGACCCCTCCTCAATTTGTACTGTAATGCGAAGTGATGGGACTTCTCTCTATGCAACCAGA GATCTTGCAGCTGCTATAGATCGAATGGACAAGTATAATTTTGATACAATGATATATGTGACAGATAAAGGACAA AAAAAGCATTTTCAGCAAGTATTCCAAATGCTGAAGATCATGGGATATGACTGGGCAGAAAGGTGCCAGCACGTG CCCTTTGGAGTAGTACAGGGAATGAAGACTCGAAGAGGAGGATGTCACTTTCCTGGAAGATGTTTTAAATGAGATT CAATTAAGGATGCTACAGAACATGGCTTCAATTAAGACAACTAAAGAACTCAAGAACCCACAAGAGACTGCAGAG AGGGTCGGGCTCGCAGCACTCATTATTCAGGACTTCAAAGGTTTACTCTTATCTGACTACAAGTTCAGCTGGGAT ACTTTTGGATGTGGGTACCTGAATGACTTCAACACTGCTTGTTTACAAGAGCCACAGTCTGTTTCAATTCTTCAG CATCTTCTCAGGTTCGACGAGGTGCTTTATAAATCATCTCAGGACTTTCAACCCAGGCATATCGTCAGTTACCTT CTAACTTTAAGTCATCTTGCAGCTGTGGCACACAAAACACTACAAATAAAAGATAGTCCTCCTGAAGTGGCTGGG GCCAGACTTCATCTTTTCAAAGCTGTCCGTTCTGTCCTAGCCAATGGAATGAAACTTCTTGGAATAACACCTGTA TGTAGGATGTAA

WO 2004/030615 PCT/US2003/028547

2259/6881 FIGURE 2076

MACGFRRAIACQLSRVLNLPPENLITSISAVPISQKEEVADFQLSVDSLLEKDNDHSRPDIQVQAKRLAEKLRCD
TVVSEISTGQRTVNFKINRELLTKTVLQQVIEDGSKYGLKSELFSGLPQKKIVVEFSSPNVAKKFHVGHLRSTII
GNFIANLKEALGHQVIRINYLGDWGMQFGLLGTGFQLFGYEEKLQSNPLQHLFEVYVQVNKEAADDKSVAKAAQE
FFQRLELGDVQALSLWQKFRDLSIEEYIRVYKRLGVYFDEYSGESFYREKSQEVLKLLESKGLLLRTIKGTAVVD
LSGNGDPSSICTVMRSDGTSLYATRDLAAAIDRMDKYNFDTMIYVTDKGQKKHFQQVFQMLKIMGYDWAERCQHV
PFGVVQGMKTRRGDVTFLEDVLNEIQLRMLQNMASIKTTKELKNPQETAERVGLAALIIQDFKGLLLSDYKFSWD
RVFQSRGDTGVFLQYTHARLHSLEETFGCGYLNDFNTACLQEPQSVSILQHLLRFDEVLYKSSQDFQPRHIVSYL
LTLSHLAAVAHKTLQIKDSPPEVAGARLHLFKAVRSVLANGMKLLGITPVCRM

PCT/US2003/028547

FIGURE 2077

TTTTTTTTTTTTTTTTTTTTTTTTTAGATTATTTAAGTTTCTTATAGATTCTGGATATTAGACCTTTCTTAGATGCATA TAATGTTGAAGTCACTGATATATTTGTTTGACTGCATTCCCTACCCTGCTTCCCTAGAGAGAACTGATCTCAT CCAGTGAAAAGGATAAATGGCATTGTCCATCTTTTAATGAACTACTGAGTGTTAAGAAGAATATTCTTCTTTTT CTCATGTTGAAACTCAAATTACAACATTTAAAAAATATGTCATTTGGAGGTCAGTGGAGAGGTTTGAATTAGAAG CATGTATTTGGAGTAGTAGAGGAAGCATTGTAGAAGAGGTAAAGAGACCTGGGCTTTTTTCTCAGTCTGTTTTTT TTTGCAGTAGGATTTTAAAGGAGACATTTAGCTTGCCAGACATCAGTTTTCATGTCTATAAAATAAGGTGGCTAG TATAAGAGGAAGAATTTTTTGAGACTAGGTCTTGCTCTGTCACCCAGACTGGAGTGCAGTGGCATGATCTCGGCT CACTGCAACCTCTGCCTCCTGGGTTCAAGCAATTCTCGTGCCTAAGCCTCCCGAGTAGCTGGGCTTACGGGCAC<u>A</u> $\underline{\textbf{\textit{TG}}} \texttt{CCACCACGCCTGGCTAATTTTTGTATTTTAGTAGAGATGGGGTTTTTCCATGTTGGCCAGGCTGGTCTCAAA}$ TTTTA<u>TAA</u>GATGATAAGAAAAACATTCTGAATAAATACTAGGTTATTTCTCATTTTCTTGCTTTTAATTTTGTTT TTTATTTATTTATTTTATTTTACTTTTTTGAGACAGAGTTTCGCTCTTGTCACCCAGGCTGGAGTGCAGTG GCACAATCTTGACTCGCTGCAGTCTCCACCTCCAGGATTCAAGCGATTCCCCTGCCTCAGTCTCCCAAGCAGCTG CAGGCATGAGCCACCGCTCTCGGCCCCCTTGCTTTTAATTTTGAAAGTACACATAACACCTTCTTCTGGTAAAGG TATGTCTCAATGGAGAACTCATAGTGATTAGTCTTTGTTTAACAACTAATGCTTTTAAGGTAACAGTTCTATCTC GTTTCGATGTCTGTCTTTAGAGAAGTAGCTGATTTTCAGCTTTCTGTGGATTCTTTATTGGAAAAAGACAATGAC CATTCAAGACCAGATATTCAAGTTCAAGCCAAGAGACTAGCAGAGAAGGTACGTTAGCACTATTATCTCTTTTTG ACATTGTAATAAACTTGTTATTAAAAAAAGTACTTTGCAGGCTATCTCAGCCATAATAGTGAATTTAATAGTGTT TCTTTGAGGCATCTTGTGTAATATAATTTAAATTCATTTTAGCCATGTACTATAAGGTTATAATGATTTTTCAGA TTAGTTATAAAGCACTCCTCTTGAGCTGACATTGTTCAATTTTTTGATTAACCACTTACAGGAAGACTGAAGTGT TAATTAAATTTACAGATTGAAGCTGG